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JULY
1991

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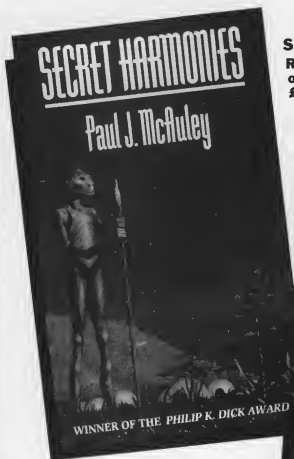


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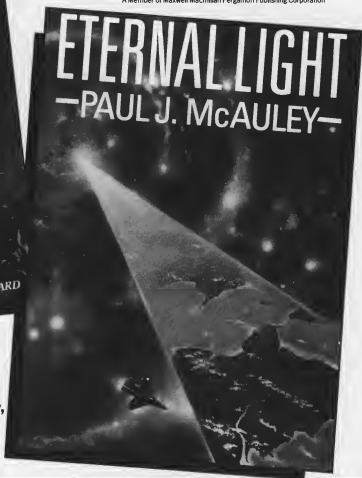
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SCIENCE FICTION AND FANTASY

No 49

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Interface

David Pringle

In the "Interface" column of *IZ* 46, I mentioned the new resurgence in alternative-world stories and in particular the desire of some British sf authors to rewrite American history (trends exemplified by Newman & Byrne's story "Ten Days That Shook the World," last issue). Now it's time to comment on another and much larger trend which I see in contemporary British science fiction — namely, the Rediscovery of the Stars. Stephen Baxter's novella "The Baryonic Lords," part one of which we run this issue, is a good example of what I mean.

The Stars Are for Britain

A couple of years ago, Iain M. Banks took the British sf world by surprise when he began to publish his large-scale space operas (*Consider Phlebas*, *The Player of Games*, *Use of Weapons*). These are intelligently written books which use all the stock motifs of traditional, wide-screen American sf — spacecraft, alien planets, galactic empires, super-weapons, the far future — and the general surprise was occasioned by the feeling that UK writers normally "just don't do that sort of thing" (English writers, at any rate; the fact that Banks is a Scot was seen by a few people as some kind of explanation).

But almost simultaneously, Ian McDonald began his sequence of extravagant, mainly interplanetary novels (*Desolation Road*, *Out on Blue Six*) — very different in tone and substance from Banks's, but equally full of vim (as it happens, McDonald is a Liverpool-born Irishman with a Scottish name). Meanwhile, Paul J. McAuley brought his extensive scientific knowledge and writing skills to bear on interstellar fiction with his debut novels *One Hundred Billion Stars* and *Secret Harmonies* — soon to be followed by his magnum opus to date, *Eternal Light*. (Paul is an Englishman of Irish extraction, now resident in Scotland.)

"Home Counties SF," as one Scottish writer has unkindly dubbed the dominant British science fiction of the 1970s and 80s, seems to be shrivelling away fast: there is actually very little of it about any more. Kent-born Colin Greenland turned to

space opera with his much-praised *Take Back Plenty*, and he is currently at work on a new book in a similar vein. Meanwhile, Stephen Baxter's first novel, *Raft*, appears this month from Grafton Books, its cover plastered with commendations from Joe Haldeman, Bob Shaw and Charles Sheffield.

These worthies say things like this: "Raft is good hard sf of a kind rarely seen nowadays"; "if you wonder what happened to the 's' in 'sf' you should read this book"; and "a special kind of hard sf in which the alienness is only starting where less imaginative writers would have given up." Steve Baxter lives near High Wycombe, Bucks. We are pleased to be publishing his universe-spanning novella "The Baryonic Lords" simultaneously with the appearance of his first novel in hardcover.

Science Fiction is Here to Stay

So what is going on? For 15 years or more, following the end of the exciting "New Wave" period of the 1960s, British sf was marked by its introspection, its gloominess, its disavowal of any kind of expansiveness or grand gesture. Much of this was due to the New Wave writers themselves, who had led a frontal attack (welcome at the time) on the apparently worn-out motifs of space travel, the far future, alien encounters and all the associated clutter of 1940s and 50s American sf. I have no wish to denigrate the achievements of writers such as Brian Aldiss, J. G. Ballard and Michael Moorcock, whose best work is among the finest that British sf has ever produced. It is their influence on a somewhat younger group of English writers which now seems unfortunate.

Throughout the 70s and much of the 80s, a great deal of British sf was marked by the "post-New Wave" syndrome — the aforementioned gloominess, introspection, etc. Talented writers seemed to ally themselves in what I once called the "Wessex School of SF" (which, I suppose, is pretty much the same thing as "Home Counties SF"). The past held more attractions than the future for their imaginations; the English landscape, both urban and pastoral, was of more concern to them than cosmic vistas. The progress of their work led many of them out of science fiction altogether, into fantasy, psychological horror and "the mainstream."

Some excellent books were

produced, but often they weren't what most readers would recognize as science fiction. Moreover, the examples which some of these writers set were rather dispiriting for a still younger generation of would-be sf authors. There were too many unspoken (and in a few cases loudly enunciated) Thou Shalt Nots... To take the most obvious example: tales of space travel (unless they took the form of stylish pastiches) were clearly *verboten*. Of course, I exaggerate: there were exceptions among the British sf writers of the 1970s and early 80s — Bob Shaw and Ian Watson are just two examples — but one feels these authors really had to struggle against the prevailing ethos of "keep it small, keep it downbeat, keep it close to home."

Gene-Rats and Neo-Stapledonians

Well, the New Wave is long past, the lengthy post-New Wave slump is definitely over, and British science fiction is enjoying an imaginative boom the like of which it hasn't experienced since the 1960s themselves. For me, a key word is *exuberance*: today's writers feel liberated from old constraints and they are relishing their freedom. A number of them have scientific training, and they are excited by ideas drawn from the sciences; they are interested in the future; they are unashamedly attracted to many of the traditional themes of sf.

It is easy to characterize much of this as a kind of neo-conservatism, a harking back to the 1940s and 50s. Colin Greenland took such a tack in a wry speech he gave at "Reconnaissance," the small sf convention held in Cardiff in February 1991. He had been asked to talk on "generations in sf" and the eight-letter file-name of his word-processed notes turned out to be GENERATS — an appropriate label, he thought, for a group of young British sf writers who are reverting to genetic (or generic) type, space-fiction writers reborn. Two whose work he talked about at some length were Eric Brown and Keith Brooke, but he did not exclude himself and Iain Banks from the ranks of the generats.

"Gene-rat" is not a tag that's likely to catch on, though, being every bit as unlovely as Charles Stross's nine-day wonder, "Technogoth." So what to call Britain's new generation of space-fiction writers? Neo-Stapledonians; or the Sons of Arthur? No, these labels are altogether too

backward-looking. I don't view this back-to-the-genetic-roots movement as necessarily conservative or nostalgic: there may be an element of *reculer pour mieux sauter*, of drawing back the better to leap, but the chief concerns of these authors are after all science and the future — they are facing outwards, not inwards. And if science fiction (in Britain) is to live up to its name, it will follow these writers' leads.

SF Award Results

The winners of this year's **Nebula Award**, presented by the Science Fiction Writers of America, are as follows:

Best novel: *Tehanu: The Last Book of Earthsea* by Ursula Le Guin

Best novella: "The Hemingway Hoax" by Joe Haldeman

Best novelette: "Tower of Bayblon" by Ted Chiang

Best short story: "Bears Discover Fire" by Terry Bisson

The Haldeman novella first appeared in *Asimov's* (and has since been expanded into a novel) — see our interview with him in *IZ* 44; the Ted Chiang novelette appeared in *Omni* (a debut story — quite an achievement for this unknown writer); and the Terry Bisson short story appeared in *Asimov's* (it was mentioned in our Bisson interview — see *IZ* 40).

The Philip K. Dick Award for the best paperback-original sf book published in America has been won (for the first time, we believe) by a short-story collection, *Points of Departure* by Pat Murphy. This fine volume contains Pat's *Interzone* story "His Vegetable Wife" (from our issue 16) and many other notable pieces. See the interview with Pat Murphy in *IZ* 42. Runner-up for the 1991 PKD Award was the novel *The Schizogenic Man* by Raymond Harris. The other shortlisted titles were *Winterlong* by Elizabeth Hand, *The Oxygen Barons* by Gregory Feeley and *Clarke County*, Space by Allen Steele.

A note to Interzone/Aboriginal Subscribers

At the time of writing we have taken almost 100 subscriptions to *Aboriginal SF* as a result of our special *Aboriginal* swap issue (*IZ* 47), which is pretty good going. This is a note to ask all those who have subscribed to *Aboriginal* for the first time via us to please be patient: your subscriptions will commence with *Aboriginal's* September-October issue,

which should be mailed from America in August. Bear in mind that it is only a bimonthly magazine, and that transatlantic post takes some time to arrive.

Aboriginal's special "Interzone issue" (featuring the contents of our last issue, number 48) will have appeared in early June. We await American readers' reactions with great anticipation: if we can take a 100 subs for *Aboriginal*, perhaps *Aboriginal* can take 1,000 subs for us — given that magazine's much larger subscription base? More news in due course.

(David Pringle)

OUR NEW ADDRESS: please note that *Interzone* has changed address. We have moved from our old address of 124 Osborne Road to this new one: **217 Preston Drive, Brighton BN1 6FL**. It's just around the corner, but we now have much-needed larger premises in which to store books and magazines. (The phone number remains the same: 0273-504710.)

Interaction

Dear Editors:

I'm writing to inform you that, after my old subscription has finished, I won't be renewing my subscription. I've still another five or so issues forthcoming and, since they're already paid for, I might as well take them.

I've decided to stop subscribing due to a matter of taste. I've read thirteen issues of *Interzone* and there's not one story I could honestly say I liked, not one. I don't see much point in reading your magazine if I don't like it. The reason I subscribed in the first place was because I was submitting my own stories for consideration and thought it only right to check out the magazine.

The reason why I don't enjoy your magazine is that I find the stories impenetrable. The best sf author I've read to date has to be Cordwainer Smith. When I first picked up one of his collections I immediately thought, "Oh here we go again, more inaccessible bullshit." But it wasn't. Admittedly there's a lot going on in his stories, a lot of detail but, unlike some, I didn't feel suffocated by all this information, it came in a steady and natural flow. He's the most enriching and moving writer I've read.

It is Smith's humane style that is

missing from the stories in your magazine. The style of the *Interzone* stories are bland and impersonal, as if they're being narrated by robots. It is such styles that I believe are responsible for the rapid decrease in the popularity of sf.

I think this is the reason why people read sf authors like Isaac Asimov. I've just read his book *Nemesis*. Okay, no one is going to argue that Asimov is an original writer but his style is so accessible you just sail through a story like *Nemesis* from page one until page last.

When you read books by authors like King or Asimov you feel like a passenger in a Porsche, that's how fast-paced their styles are. On the other hand reading most of today's sf is like sitting in a Lada in a traffic jam on the M25.

You at *Interzone* seem to have the notion that anything original is good. Just because the idea is "original" that doesn't mean to say it's entertaining. Reading *Interzone* is like trudging through two feet of snow in a blizzard.

Admittedly the stories I've sent you aren't anything great, okay, but I think it's only fair to say that I'm only eighteen and have been writing short stories for less than two years. So, what the hell, I've got my whole life ahead of me to practice and I think my present stories are not bad considering my age and inexperience.


Paul Campbell
Airdrie, Lanarkshire

Editor: Oh, dear. We suspect there may be a hint of sour grapes in Mr Campbell's response to *IZ*, but it does worry us that he has found not one story to enjoy in these pages. Perhaps we should be publishing a lighter, more upbeat, more "humane" sf magazine. Anyone agree? Who would like to see a special "happy issue" of *Interzone*? We're thinking about it.

Dear Editors:

Robert Holdstock's "The Bone Forest" was the best story in *Interzone* 45. I live one field away from a wood dominated by deciduous trees, and I share Holdstock's fascination with woodland. The contrasting areas of dark shadow and bright sunshine, the massive bark-encrusted boughs of age-old trees, and the quiet, whispery shuffle of leafy wind-blown branches can give the wood an eerie yet peaceful feeling. I could imagine Huxley, the intrepid folklorist (?) traversing the deep natural pile of moss that covers much of the wood's floor, while ducking and twisting through tangled overgrowth or

Continued on page 28



THE BARYONIC LORDS (Part One) Stephen Baxter

Humans called it the Tyranny of Heaven. Soon after the dawn of their history humans had come bustling out of their birth planet, alive with plans and goals, convinced that the potential of mankind was infinite. But the Xeelee were there first.

In those first, distant days the universe had been a dangerous and unpredictable place. Like negligent parents the Xeelee followed their own mysterious imperatives, hovering over a thousand lesser races — humans amongst them — which squabbled for relative supremacy over scraps of Xeelee technology and wisdom. Mankind survived — even prospered.

But it wasn't enough. Humans wanted more. Humans wanted it all.

Gradually, slowly, humans probed the great Project of the Xeelee. A hundred epic quests were undertaken, a hundred names thrown up to resonate through the long afternoon of human history. Jim Bolder, who piloted a stolen Xeelee nightship to the site of their greatest single artifact: the Ring, that monstrous torus whose mass had ripped open a gateway to another universe. The "vacuum-diagram" man Paul, who learned that the world-sized box men called the Sugar Lump was a time engine — that the Xeelee appeared to be

engaged in modifying their own history — and whose own timeline was twisted into an acausal knot by the great machine.

A hundred heroes, a hundred fragments — but understanding never came. What was the Xeelee Project? Why were they trying to rebuild their own history?

Why were they trying to escape from the universe itself?

Like leaves, centuries fell away. Mankind grew stronger, and at last the strongest of all — save for the Xeelee.

The Tyranny of Heaven prevailed.

The wars started. More legends were written as waves of human assaults pounded against the great Xeelee sites.

The Xeelee barely seemed aware of this.

As more centuries passed the goals and purpose of the wars were lost; but still men fought on, enraged insects battering against the glass-walled Xeelee.

Bloodied fragments of mankind were sprinkled across the galaxies.

The Xeelee, unimpeded, appeared at last to take pity. Remnants of humanity were swept up and confined in a box-world, the interior of a four-dimensional sphere. Humans, trapped like ants



between lines of latitude on a globe, lived by the light of the artificial sun the Xeelee gave them.

But the Xeelee left a doorway out, through a hypercube men called the Eight Rooms.

The human story seemed over. Men, saved from themselves, forgot the Eight Rooms.

A million years wore away.

Then the miniature sun began to fail; and a human called Teal was forced to leave his wife, Erwal, and cross the gathering winter to seek the Eight Rooms...

At last the Project was complete. The migration alone had taken a million years. In the universe outside other races flared in the darkness like candles while the night-dark Xeelee fleets streamed through Bolder's Ring and disappeared into the folded Kerr-metric region. Freighters the size of moons had patrolled the space around the Ring, their crimson starbreaker beams dispersing the galaxy remnants that still tumbled towards the Ring like blue-shifted moths.

But now it was over. The Ring, its function fulfilled, sparkled like a jewel in its nest of stars. And the universe that had been modified by the Xeelee was empty of them.

Call it the antiXeelee. It was... large. Its lofty emotions could be described in human terms only by analogy. Nevertheless —

The antiXeelee looked on its completed works and was satisfied.

Its awareness spread across light years. Shining matter littered the universe like froth on a deep, dark ocean; the Xeelee had come, built fine castles of that froth, and had now departed, as if lifting into the air. Soon the shining stuff itself would begin to decay, and already the antiXeelee could detect the flexing muscles of the creatures of that dark ocean below. It felt something like contentment at the thought that its brothers were beyond the reach of those... others. Of the cosmic creatures, the children of dark matter: of the Engineers.

Now the antiXeelee turned to its last task. Seed pods, spinning cubes as large as worlds, were scattered everywhere in an orderly array, millions of them dispersed over the unravelling curve of space. The antiXeelee ran metaphorical fingers over each of the pods and over what lay within: beings with closed eyes, ships with folded wings, refined reflections of the antiXeelee itself.

The work was good. And now it was ready.

...There was a discontinuity. All over the universe the pods vanished like soap bubbles.

The seed pods' long journey back through time had begun. They would emerge a mere hundred thousand years after the singularity itself, at the moment when the temperature of the cosmos had cooled sufficiently for matter and radiation to become decoupled — so that the infant universe became suddenly transparent, as if with a clash of cymbals.

Then the creatures within would unfold their limbs, and the long Project of the Xeelee would begin.

Eventually the Project would lead to the development of the seed pods, the spawning of the antiXeelee itself; and so the circle would be closed. There was, of course, no paradox about this causal loop; although — for amusement — the antiXeelee had once studied a toy-creature, a human from whose viewpoint such events had seemed not merely paradoxical but impossible. Something like a smile reflex spread through its awareness. (...And, revived like an afterthought by the memory, the toy-creature whispered once more into being, a faint coherence in the vacuum.)

So its work was done; the antiXeelee could let go. It spread wide and thin. With a brief, non-localized burst of selectrons and neutralinos the awareness of the antiXeelee multiplied, fragmented, shattered, sank into the vacuum.

Forgotten, the toy-creature stirred like an insect in its cocoon.

Paul opened his eyes.

Space had never been empty. Within the tight spacetime limits of the uncertainty principle "empty" vacuum was filled with virtual particle sets which blossomed from nothing, flew apart, recombined and vanished as if they had never been — all too rapidly for the laws of mass/energy conservation to notice.

Once, human scientists had called it the seething vacuum. And now it was inhabited.

The Qax was a creature of turbulent space, its 'cells' a shifting succession of virtual particle sets. Physically its structure extended over many yards — a rough sphere gigantic in subatomic terms containing a complex of virtual particle sets which stored terabytes of data: of understanding, of memory stretching back over millions of years.

The Qax had come to awareness as a conglomerate of hexagonal turbulence cells in a murky, long-vanished sea. It had been miles across, dwarfing its present expanse; and yet, limited by their unstable environment, the Qax and its few oceanic brothers had remained relatively unsophisticated. But despite their handicaps the oceanic Qax had built a high technology and had come to dominate their neighbours.

Then a human named Jim Bolder had come to the Qax world...

Over half the Qax had undergone discontinuity escaping the nova Bolder had caused.

On their reemergence as an interstellar force the Qax had sought out humanity; but — as Bolder in his blundering way had evidently hoped — the Qax's forced withdrawal from affairs allowed mankind to develop strengths, allies, defences which the Qax never felt able to challenge.

But now history was over, and — even for most of the Qax — Jim Bolder and his nova were a mere episode lost in the dregs of time.

Forgotten. Except by those who had been there.

Like the shadow of a cloud the Qax cruised over turbulent space, seeking humans.

There was a transparent box, half as tall again as a man. It hung in space, apparently forgotten and purposeless. It would have had no conceivable significance in the long twilight of the universe... if it had not occupied the site of Earth, the long-vanished original home of man.

A Qax had once visited the site. It had placed quantum-inseparability markers around the box. The Qax were linked to the markers by single quantum wave functions, ghostly threads that stretched across light years, and they had scattered millions of markers over the spaces once inhabited by men.

At last a human called Teal walked into the box. He stared, open-mouthed, at the stars. He was gaunt, filthy, and dressed in treated tree-bark; a rope tied to his waist snaked around a corner and into another universe. After some time the rope grew taut and Teal's limp form was hauled away.

The inseparability markers blared their warnings. A Qax hauled itself like a spider along the quantum web to the box — but it arrived too late; the box was empty. The Qax hissed, settling into space like condensing mist.

With a patience born of millions of years it prepared to wait a little longer.

The antiXeelee hovered over Paul. He was — discorporeal; it was as if the jewel of consciousness which had lain behind his eyes had been plucked out of his body and flung into space. He did not even have heartbeats to count. He remembered ruefully the casual contempt with which he had regarded Taft, Green and the rest on the Sugar Lump, how he had soared over their shambling, makeshift bodies, their limited awareness!

...And yet now, stranded, with no idea why he was here, he would have given a great deal to return to the comforting furniture of a human body.

At least the antiXeelee was here with him. It was like a great ceiling under which he hovered and buzzed, insect-like. He sensed a vast, satisfied weariness in its mood, the contentment of the traveller at the end of a long and difficult road. For a long time he stayed within the glow of its

protection.

Then it began to dissolve.

Paul wanted to cry out, like a child after its huge parent. He was buffeted, battered. It was as if a glacier of memories and emotions was calving into a hundred icebergs about him; and now those icebergs in turn burst into shards which melted into the surface of a waiting sea...

And he was left alone.

It was impossible to measure time, other than by the slow evolution of his own emotions.

He had lived among men no more than a few months, on the Xeelee seed pod they had called the Sugar Lump; but in that time he had been shown visions, sounds, scents, tactile images from all the worlds of the human empire, and he had formed an impression of the great storm of souls that constituted the human race. Each of those souls, he knew, was like a tiny line drawn in spacetime, with a neat start, a thickening into self-awareness and a clean conclusion. The race was — had been — a vast, dynamic drawing of billions of such lifelines.

He, Paul, spoiled the picture.

His lifeline began in a tight, acausal knot wrapped around the Sugar Lump — and was then dragged across the face of the picture like a vandal's scribble — and finished here, a loose end beyond the conclusion of history.

He felt no privilege to be here. His life was artificial, a construct, a random jotting of the Xeelee. He could see inside stars... but he had never looked into a human heart.

He endured despair. Why had he been brought to this point in spacetime and then so casually abandoned? Had he been correct in detecting a strain of amusement in the vast, crashing symphony of the antiXeelee's thoughts? Was he truly no more than a toy?

The despair turned to anger, and lasted a long time.

Later he became curious about the ageing universe around him. He had no senses, of course: no eyes, no ears, no fingers; nevertheless he tried to construct a simulacrum of a human awareness, to assign man's labels to the objects and processes around him.

There were still stars. He saw sheets of them, bands and rays, complex arrays.

Evidently the Xeelee had remade the universe.

But there were anomalies. He found many supernova sites, swelling giants, wizened dwarfs: the stars were aged, more aged than he had expected. At least a million years had passed since his time on the Sugar Lump — enough time for the Xeelee to have completed their galactic engineering — yet this immense duration was insignificant on the cosmic scale.

So why did the stars seem so old? He found no answer.

Driven by curiosity he began to experiment with his awareness. Physically he was composed of a tight knot of quantum wave functions; now, cautiously, he began to unravel that knot, to allow the focus of his consciousness to slide over spacetime. Soon it was as if he was flying over the arch of the cosmos, unbound by limits of space or time.

Throughout the galaxy he found the works of man. He lingered over places and artifacts abandoned by history, dwelling as long over a drifting child's toy as over some huge spacegoing fortress.

There were, of course, no people left alive.

At first Paul described to himself the places he visited, the relics he found, in human terms; but as time passed and his confidence grew he removed this barrier of words. He allowed his consciousness to soften further, to dilute the narrow human perception to which he had clung.

All about him were quantum wave functions.

They spread from stars and planets, sheets of probability that linked matter and time. They were like spiderwebs scattered over the ageing galaxies; they mingled, reinforced and cancelled each other, all bound by the implacable logic of the governing wave equations.

The functions filled spacetime and they pierced his soul. Exhilarated, he rode their gaudy brilliance through the hearts of ageing stars.

He relaxed his sense of scale, so that there seemed no real difference between the width of an electron and the broad sink of a star's gravity well. His sense of time telescoped, so that he could watch the insect-like, fluttering decay of free neutrons — or step back and watch the grand, slow decomposition of protons themselves...

Soon there was little of the human left in him. Then, at last, he was ready for the final step.

After all, he reflected, human consciousness itself was an artificial thing. He recalled Green, on the Sugar Lump, gleefully describing tests which proved beyond doubt that the motor impulses initiating human actions could often precede the willing of those actions by significant fractions of a second. Humans had always been adrift in the universe, creatures of impulse and acausality, explaining their behaviour to each other with ever more complex models of awareness. Once they had believed that gods animated their souls, fighting their battles through human form. Later they had evolved the idea of the self-aware, self-directed consciousness. Now Paul saw that it had all been no more than an idea, a model, an illusion behind which to hide. Why should he, the last man, cling to such outmoded comforts?

There was no cognition, he realized. There was only perception.

With the equivalent of a smile he relaxed. His

awareness sparkled and subsided.

He was beyond time and space. The great quantum functions which encompassed the universe slid past him like a vast, turbulent river, and his eyes were filled with the grey light which lay behind all phenomena.

Teal entered the Eighth Room and saw the stars.

The event spread like a soft blue dye through the linked quantum phenomena which comprised Paul's being. At the site of Earth there was a human once more: but a human alone, weak, tired, close to dissolution. Paul, godlike, pondered the implications for an unimaginable interval.

Then he came to a decision. He reconstructed his awareness; a quantum jewel danced against the clear walls of the Eighth Room.

History had resumed.

Erwal pushed out the greased flap of the teepee. Hot, humid air gushed into the blizzard, turning instantly into fog. Damen, dozing, grunted and burrowed more deeply into his pile of furs.

Erwal pulled her mummy-cow furs more tightly around her neck and stepped out into the snow — it had drifted some three feet deep against the teepee's walls — and smoothed closed the flap. Clutching her slop pail she looked about in wonderment. The world seemed to have collapsed to a small, grey sphere around her; rarely before had she seen snow so heavy. The flakes clung to her eyelids and already she could feel the down on her upper lip becoming stiff with cold. Dropping her head, she began her struggle through the blizzard.

Somewhere above the clouds, she thought wistfully, was the sun, the mile-wide ball of sullen red that still wound through its increasingly meaningless spiral between the worlds, vouchsafing little light or warmth. And above the sun lay the inverted world of Home, the birthplace of the forebears of Damen and his brother, her first husband Teal. She recalled how, as a girl, she had watched the bark balloons rise up their guide ropes and cross the air to the sister world. But as the sun had faded the balloon flights had grown more infrequent. Everyone could see that Home was just as much in the grip of the ice as the Shell; why risk one's life just to see mo'ne snow? So the balloons were abandoned, their fine-stitched envelopes allowed to rot into the ground; and at last, during a spectacular storm, the rope that had been slung between the worlds frayed and snapped, falling to the ground in great, sad coils.

Finally there had come a summer when the snow failed to melt. Now there were children in the village who had never seen bare earth...

If it weren't for the deep roots of the cow-trees, the foraging skills of the mummy-cows, they would

all have perished long ago.

Already the snow had soaked through her leggings and was beginning to freeze against her skin. With a sense of urgency she forced her legs through the snow, dragging the slop pail behind her. Soon she was out of sight of the teepee; the rest of the village remained hidden by walls of snow, so that she had to make her way by memory alone. At last she reached the village's central stand of cow-trees. She leaned against a tree for a few minutes, sucking at air that seemed thick with the snow. Then she began to dig with her bare hands into the drifts at the base of the tree, finally exposing hard, brown earth. She dumped the contents of her slop pail against the roots of the cow-tree and stamped the waste firmly down against the wood. Then, wearily, she straightened up and began to select some of the tree's more mature buds, filling her pockets. The meat buds were small, hard, anaemic; she bit into one, tasting sourness.

A villager approached through the storm. At first Erwal made out only a blur of rags against the snow, but the villager noticed Erwal and leaned into the wind, making towards her.

Erwal shouted: "Good day!"

From within a voluminous hood there came a muffled, brittle laugh; then the hood was pushed back to reveal the thin, pretty features of Sura, wife of Borst. "It's hardly that, Erwal." Sura had dragged her own slop pail across the drifts; now she dumped her waste alongside Erwal's. As she worked Sura's shapeless fur blanket fell open and Erwal made out a bundle suspended over her thin chest, a sling of skin from which protruded tiny hands, a small, bare leg. Erwal frowned; the baby's exposed flesh seemed blue-tinged.

Once Sura had finished Erwal held her head close to the girl's. "How are you, Sura? How are your family?"

"Borst is ill." Sura smiled, her eyes oddly bright. "His lungs will not clear; he has been barely able to stand." Absently she patted the bundle against her chest.

"Sura, will you let me visit your teepee? At home there is only myself and Damen..."

"Thanks, my friend, but I'm sure I can manage." Again that bright look entered the girl's pale eyes and she brushed a wisp of hair back from a high forehead. "The child is a burden, but she's such a comfort."

"I'm sure she is," Erwal said evenly. The pain of her own lost child — stillborn soon after Teal's first mysterious voyage away from the village — was too long ago to mean anything now, and the dismal fact that she and Damen had proven unable to bear another child had come to seem trivial compared to the huge, greater tragedy sweeping down over their little community. Erwal had watched Damen's bearded, angry face grow lined with care as the seasons wore away, and, despite the pool of failure at the centre of their relationship, she had done

everything she could to support him as village leader.

And now, of course, they were too old.

"How is the baby? Will you allow me?..." Erwal opened Sura's blanket just a few inches, tenting the flaps so that the snow was kept from the child, and ran her fingers over the hot bundle. Sura looked on, a vacant smile hovering about her mouth. The child's breathing was rapid, ragged; the tiny hands were as if carved from ice. "Sura, you must take the child indoors. Keep her covered. I am afraid her limbs are frozen —"

"She needs air," Sura said, her voice high. "It's so musty in the teepee."

Erwal stared into Sura's eyes. Sura was little more than a child herself. Her skin was smooth but her eyes were ringed with dark shadows. "Sura," Erwal said urgently, "you aren't thinking clearly. The child is too cold."

The shallow smile evaporated. Sura brushed Erwal's hands away and began to paw at the baby. "She'll be all right." She cupped one tiny hand in her own and began to rub vigorously.

"Sura, take care, I beg you."

"She just needs to get warm —"

There was a soft crackle, as if a thin crust of ice had broken.

It was a sound that Erwal would remember to her dying day. Sura's head jerked down; her jaw seemed to be swinging loose, the muscles in her cheeks slack. Erwal, watching in horror, felt as if she would faint; it was as if she saw the whole tableau, Sura, the child and the snow, from a great distance.

Sura opened the hands which had cupped the child's. Detached fingers lay like tiny jewels on Sura's calloused flesh. The child whimpered, stirred against its mother. Sura jerked her hands back, so that the frozen pieces of flesh fell to the snow. She pulled her blanket tight around her and ran, oblivious to the drifting snow.

Erwal bent and scooped up the tiny fingers, the fragments of palm and wrist.

When she returned to the teepee Damen had woken. Wrapped in a blanket he held a pot of water over the fire with wooden tongs, and he scowled at the draught Erwal made. The smoke from the fire, disturbed, swirled around the teepee walls in search of the vent at the apex.

Erwal, wrapped in her furs, felt like something inhuman, a gigantic animal intruding into this place of warmth. She pushed away the furs, hauled off her frozen leggings and huddled near the fire; Damen wrapped a heavy arm around her until the shivering stopped. When the water boiled Damen poured it over fragments of mummy-tree bark. Erwal sucked at the thin, steaming tea.

Then she opened her hand.

Damen picked up one tiny finger. His face grey he studied the tiny nail, the knuckle's bloodless

termination. Then he took the rest of the fragments from Erwal and shoved them out through the teepee flap into the blizzard. "Whose child?"

"Borst and Sura; I met her at the tree stand with her slops. I have to go to her, Damen."

"Do you want me to come?"

"...No. It's best if I go alone, I think. You keep the teepee warm." She drank her tea, deeply reluctant to don her furs once more. "Damen, we can't go on like this. Every year is worse than the last. I suspect the trees are starting to die, and even the mummy cows aren't immortal."

"I know, love. But what can we do? We have to survive until the sun recovers, and then —"

"But what if it doesn't recover? It's been failing since your grandfather's day. Allel told us so himself. And now — Damen, it's only early autumn, but the blizzard out there is blind; if we're not careful the teepees could be snowed over before the winter's out." She shivered, imagining tiny pockets of warmth lost in the snow, suffocating, cooling, calling to each other.

"The sun will recover," Damen said wearily.

She said urgently, "But we don't have to wait here to die. Teal said —"

"No." He shook his massive head, his grey beard scraping over his chest.

"But he told us there was a way out of here," she insisted. "The Eight Rooms. He found them, saw them. Your grandfather believed him."

"Allel was a foolish old man."

"And Teal returned there. He said he'd leave a trail for the rest of us. Maybe if —"

He wrapped both arms around her. "Erwal, my brother was crazy. He hurt you, fought with me... He lost his life for nothing. But now it's over. He's gone, and —"

"What if he survived?"

"Erwal..."

She sighed, pulled herself away from him, and began to haul her leggings over her still-cold feet.

Damen sat in silence, staring at the fire.

As she pushed through the snow Erwal heard odd snatches of song. The melodies, soft, harmonized and sad, were fragmented by the wind, and at first she thought she was dreaming. Then Sura's teepee loomed out of the snow. Before it she made out a series of low mounds about as tall as she was. Occasionally a trunk would lift out of a mound, the two very human hands at its bifurcated tip twisting together, and slowly the songs grew clearer.

At last Erwal recognized the ancient chants of the mummy cows.

Five cows, almost the village's full complement, were grouped in a tight circle about a sixth; the latter lay at the centre of the circle, and Erwal saw that some viscous fluid had leaked from its bulk into the snow. She pushed back her hood. "Sand? Are you here?"

One of the mummy cows lifted her head; under a cap of snow a squat, cylindrical skull rotated on a neck joint and plate-sized eyes fixed on Erwal. "...I amm-m hhere, Err-waal..."

Erwal fixed her fingers in the shaggy fur covering Sand's muzzle. Since Erwal's childhood, Sand had been her favourite. "What's wrong? Why are you here?"

Sand moaned and scuffed with delicate fingers at the snow before her. "It iss-s Cale. We are... s-singing for her..."

"Singing? But why?..."

Sand closed her eyes.

Erwal turned to inspect the body at the centre of the group. Cale was silent, utterly motionless, and when Erwal pushed her fingers through the fur she felt only a diminishing warmth.

How could this have happened? The mummy cows rarely reproduced these days — there was too little fodder for them to generate the growth required — but they were virtually immortal. She walked around the fallen cow to the patch of moisture she had noticed earlier. She bent and touched the stuff. It was blood. Crouching, she probed upwards at the mummy cow's belly, exploring the soaked and matted fur. There was a tear in the flesh, a gash at least two feet long that was sharp and clean: performed by a knife.

She took deep breaths of the chill air; then she forced herself to reach forward, lift aside the flap of cut flesh, push her hands into the glistening stuff inside the cow.

She found a still, cold form. Snakelike entrails had coiled around the body in a hopeless attempt to keep it warm. Exploring by touch Erwal found the tiny buds, hard as gristle, which had begun to grow to replace the child's lost hands.

"She's dead, isn't she?"

Erwal withdrew her arms, rubbed snow over them to clean them, tucked them once more into her clothes. Sura stood beside her, her arms loose at her side. "...Yes, Sura. I'm sorry."

"It worked for your husband, didn't it? Teal, I mean. That mummy cow kept him alive by opening herself up... I suppose you despise me because I have killed a cow. Will you punish me?" Sura sounded resigned, no longer caring. "Damen is the leader. Will he reduce our rations?"

Erwal stood. "No, Sura. I understand."

"You do?"

"You were trying to save your child. What more can any of us do? What else is there? Come on." She took Sura's unresisting arm. "Let's go to your teepee."

"Yes," Sura said.

On the first clear day of the tepid spring the villagers filed in silence to a low hill a mile from the village. After months in the fug of the teepees Erwal took deep breaths of the cold, fresh air, and felt the blood stir within her. She

looked around with renewed interest. It was a still, windless day; above her the lakes and rivers of Home shone like threads in a carpet. The ruddy light of the sun was almost cheerful and frosty snow crackled beneath her feet. She tried to imagine what it must have been like in the days before she was born, when the sun was yellow and so hot that, even in spring, you could discard your furs and leggings and run like a child in some huge teepee.

At the top of the hill orange flowers were struggling to blossom through the permafrost. The villagers gathered in a rough circle around the flowers; some clasped their hands before them, others dropped their heads so their chins rested on their shirts of fur. Damen, as leader, stepped into the middle of the circle. "We're here for those who died in the winter." His voice was flat and lifeless. Without ceremony he intoned a list of names. "...Borst, husband of Sura. Brought down by fluid in the lungs. A girl, daughter of Borst and Sura; the frost attacked her flesh in the blizzards..."

Numbly Erwal counted the names. Twenty-two in all, mostly children. She glanced around the silent group; there were surely no more than a hundred souls left. Already, she knew, the outer portions of the village had been abandoned, so that their homes were encircled by silent, ruined teepees.

There were hardly any old people left, it struck her suddenly. She and Damen were the old people now. Who would be the last to go? she wondered morbidly. Some child, crying over the cooling bodies of its parents?

At that moment her resolution crystallized. With or without Damen, she had to leave this place.

Damen finished his list. After a brief, gloomy silence, the group broke up and returned to the teepees.

Twenty-five adults decided to commit to Erwal's plan. With their children, thirty-seven people would travel with her.

They gathered at the edge of the village. The split families and parting friends found little to say in the way of farewells. Erwal, with the assistance of Sura, made final adjustments to the harness around the neck of Sand, the one mummy cow they were to take. To the harness was attached a broad pallet piled with furs, blankets and cow tree buds. The rest of the expedition, spare clothes heaped on their bodies, looked on in subdued silence.

"I don't know what to say."

Erwal turned. Damen, thick arms folded, stood watching her. "Damen, don't even try."

He frowned. "Pride's an odd thing," he mused. "I should know. I've been proud, and stubborn. Pride can make it hard to admit you're wrong, no matter how misguided you come to realize —"

Erwal laughed, not unkindly. "I should swallow my pride, admit my mistake, should I?"

He looked hurt. "Erwal, you could die out there."
"But I believe we'd die here." She touched his arm, ruffling the mat of thick black hair which grew there. "This expedition needs you —"

"But I need you."

It was as if the sun had broken through cloud. Struggling to keep her voice steady, Erwal said, "You've picked the damndest time to say such a thing."

"I'm sorry."

Deliberately, with a sense of pain, she turned her head from him. "It's time to go."

"Where?"

"You know where. To the north. The way Teal described. A journey of a few days, following his markers and directions, to the Eight Rooms."

He snorted. "Following the babble of a mummy cow and a madman?"

"Damen, don't spoil this." She studied him, desperate to hold on to these final traces of warmth. "I know what I'm doing."

"I know. I'm sorry, Erwal; we've been over all of this before, haven't we?"

"A hundred times." She smiled.

"...I wish you well."

She hugged him, feeling the rough fur of his shirt under her bare forearms. "And I you, love."

"I won't see you again."

"...Perhaps if I find what I'm looking for I'll be able to return for you."

He held her away, his face hard. "Sure you will."

With that, they parted.

With gentle encouragement the mummy cow began its lumbering motion, the laden pallet scoring tracks into the hard ground. Erwal walked arm in arm with Sura. She turned back until the village was out of sight; for long after she was gone, she suspected, the dark bulk of Damen would be stationed at the edge of the village, hoping for her return.

A short, round-faced man called Arke walked with Erwal. "This winter," he said, "I lifted the body of my wife out of the teepee and into the snow. I had to wait for the thaw before I could bury her in the cow tree stand. I barely know what you're talking about with your stories of stars and ships, Erwal, but I know this. If I'd stayed at home I'd surely have died. At least with you I'll die trying to find a way out. And," he finished doubtfully, "you never know; we might even succeed."

Many of her fellow travellers, Erwal suspected, had been motivated to come by much the same mixture of desperation and doubt; and yet they had come. And, as they walked, Erwal sensed a mood of optimism generated by the very fact of their motion, that they were doing something.

But winter came early in the north.

The winds hit them first, so that the children, wailing, were forced to stumble along clinging to



the fur of the cow, who sang them simple songs. Then snow followed, and the march became a grim haul across a featureless plain punctuated by nights huddled in a single, shivering mound under a layer of blankets.

Erwal had memorized the list of directions which Teal had given to the village, and she was as sure as she could be that she was not leading her party astray. But on the more difficult days she was constantly aware that she was hardly equipped to serve as the leader of such an ambitious expedition; and when they entered the mouth of yet another blizzard she found tears leaking from her freezing eyes, and she wondered if she was guiding these people to their deaths.

Then, one day, Sura came pushing through the snow drifts. She grinned, excited, holding up a faded rag. Erwal, tired and bemused, pushed snow-speckled hair from her eyes and took the object from the girl. It was a strip of mummy cow hide. Roughly cut and uncured, the strip had been frozen before it had a chance to rot; and it was tied with a double knot.

"Teal," Sura said. "This is one of his markers, isn't it? I found it tied to a dead cow tree, just over that ridge."

Erwal stared at the battered little artefact. "Yes, it's Teal's. Call the others and tell them."

The find of the marker was treated as a great triumph, and the travellers drank Sand's milk with an air of celebration. They approached Erwal and touched her arms and shoulders, congratulating her. Erwal felt oddly distanced from all this. After all, they had only confirmed that they were on Teal's path - a path which, as Damen had repeatedly pointed out, might lead only to madness or death.

But she kept such thoughts to herself and did her best to join in the celebrations.

They made a makeshift camp in the heart of another blizzard. They burrowed together in the snow, faces buried in their furs.

In the dim morning Erwal was shaken awake. Thick with sleep and unwilling to leave her warm nest she slowly opened her eyes. Sura was bending over her, her cheeks flushed under spots of frostbite. "Erwal, we're there!"

"What?"

"The Eight Rooms! It's just as Teal described. Come on!"

Erwal pushed her way out of the snow. Her knees and hips ached. All around her people were emerging from their snow cocoons. She rubbed a little snow into her face, then took a mouthful of the crumbling stuff and let it melt on her tongue.

For once it was a clear, still day. The snow lay in great mounds to the horizon, and the desolate landscape was punctuated only by the defiant remnants of cow trees — and, on the northern horizon, by a building. Erwal squinted, straining to

see in the dim daylight. It was a large, plain box, just as Teal had described.

The Eight Rooms.

Her party began to make for the artifact. The children ran whooping, the adults following as best they could. Erwal thought of cautioning them to be careful; but she stopped herself, almost amused. What precautions were there to take? Either the Eight Rooms would save their lives... or they would have to turn back, try to reach the village before the worst of the winter set in, and wait, exhausted, for the cold to kill them.

Either way there wasn't much point in being careful. Stiffly, Erwal made her way through the snow to the Eight Rooms.

The children were soon clambering in and out of an open doorway. Erwal paused some distance from the structure and studied it carefully. She recalled Teal describing his shock at seeing how the building floated, unsupported, a foot in the air; and, bending down, she saw a strip of snowy land beneath the Rooms. She frowned, puzzling at her own unstirred reaction. What was the great wonder? Every child heard stories of how powerful the ancients had been, of how they had built the very world humans lived in; why should a box floating in the air be such a surprise?

She sighed. Perhaps she simply wasn't very imaginative. Briskly she approached the Rooms, paused only briefly at the doorway, then stepped up and over the foot-high sill —

— and nearly fainted as she entered warm, still air. She felt blood rush to her face, and, seeking support, she reached out to a wall - and pulled her fingers back, shocked. The material of the wall was warm and soft, like flesh. Arke joined her, running a calloused palm over the wall. "Isn't it remarkable? Perhaps this whole building is a living creature."

"Yes." Feeling stronger, she turned and surveyed the Room. There were hatch-like doors in all four walls, and in the floor and ceiling; through each door she could see people in other Rooms running fingertips over the walls, their expressions slack. "It's very strange..."

...Wait a moment. Rooms beyond each door? But this one Room was big enough to fill up the cube she had seen from outside, so that beyond the doors should be only snow or sky...

And yet there were Rooms where there was no space for them.

Vaguely she remembered Teal's impatient descriptions of how the Rooms were folded over each other, and briefly she struggled to understand. Then she sighed, deciding to put the mystery of the folded-up place out of her mind. If it didn't bother the children, why should it bother her?

Arke went on, "Erwal, we've done well, even if we go no further than this. We are warm and dry, and we still have the mummy cow for food. We could stay here, bring the mummy cow inside, allow the children to grow..."

"But that's not why we came here," she said, suddenly impatient. "Teal went further." She looked up, recalling how Teal had described climbing up through the roof hatch. "Come on," she told Arke. "Help me up."

Arke allowed her to climb onto his shoulders; soon others, already in the upper Room, were pulling her up through the hatch/door.

The upper Room was just like the first, with light from nowhere filling the air. A few adults stood here, looking lost. Silently she climbed to her feet. She tried to picture Teal as he had taken these steps. Straight ahead from the hatch in the floor, he had said, and push at the door...

Beyond the door was the Eighth Room. It was shaped like the rest but its walls were clear, as if made of ice. Beyond the walls was a black sky sprinkled with tiny lights.

There was a body on the crystal floor.

Arke stood beside Erwal. "Are they 'stars'?"

Shuddering, she said: "That's the word Teal gave us."

"And that —" He pointed straight ahead; beyond the farthest wall an object like a large, black seed pod floated in emptiness. "Do you think that's the 'ship'?"

Erwal tried to speak but her throat was dry.

She forced herself to look down.

The body was little more than bones swathed in rags of clothing. In one clawlike hand it clutched an elaborate knife. Erwal bent, took the knife; the skeletal fingers fell to pieces, clattering against the warm material of the floor. "This was Allel's knife," she told Arke. "Teal's grandfather. Teal treasured this knife."

Arke held her elbow. "It's a miracle he made it this far, you know. And the second time he came he didn't have a mummy cow."

"He died alone. And so close to his goal."

"But he didn't die in vain. He brought us here."

Erwal, trembling, walked to the wall nearest the ship.

"Now all we have to do is work out how to get out of here."

The others watched her, their faces pale with awe.

It is not true to say that Paul waited beside the Eighth Room after the brief appearance of the first human. Rather, he assigned a sub-component of his personality to monitor events within the Room, while he turned the rest of his multiplexed attention elsewhere. And it could not be said that Paul's patience was tested by the subsequent delay. After all he was largely independent of the constraints of time and space; and the galaxy was available for his study.

And yet...

And yet, when humans reappeared in the Eighth Room, it seemed to Paul that he had waited a very, very long time.

The humans stared at the star-strewn universe and retreated in alarm. Paul was fascinated by their angular movements, their obviously limited viewpoints. How unimaginably constraining to have one's awareness bound into a box on a stalk of bone!

But, as Paul continued to observe, memories of his own brief corporeal sojourn on the Sugar Lump stirred, oddly sharp. Godlike, uncertain of his own reaction, he watched men, women and children talk, touch each other, laugh.

He noticed the ragged, filthy clothes, the protruding ribs, the ice-damaged skin. He pondered the meaning of these things.

Eventually a grey-haired woman entered the Room. Her behaviour seemed different; she walked slowly to the crystal wall and stared out steadily at the stars.

Paul focused his attention so that it was as if he were gazing into her eyes.

The face was fine-boned, the skin drawn tight over the bones, and age had brought webs of wrinkles around the eyes and mouth. The skin was scarred, the lips cracked and bleeding. This was a tired face. But the head was held erect, the eyes locked on a universe which must be utterly baffling.

And behind those eyes a quantum grain of consciousness lay like an unripened seed.

The woman left the Room; Paul, oddly shaken, reflected.

Over the next few days the humans investigated their crystal box. They touched the walls, staring through them with blank incomprehension. They were clearly aware of the spacecraft which lay waiting just beyond the Room's walls; they pointed, knelt so they could see under it, and occasionally one of them would paw at the walls; but there was no pattern to their searches, no system; they deployed no tools beyond fingertips and tongues. But they showed no frustration. They were like children in an adult world; they simply did not expect to be able to make things work.

At length there was a flurry of activity at the brightly-lit doorway. The humans were goading some sort of animal into the Room: here came a barrel-like head, a broad, solid body covered by shaggy fur. The humans punched the beast's flanks, tugged at the hair above its trembling eyes; the creature, obviously terrified, was almost immovable. But at last it stood in the centre of the Room, surrounded by sweating, triumphant humans. It looked to left, right, and finally down at its feet. Paul imagined its terror as it found itself standing on apparent emptiness light years deep. The great head rotated like a piece of machinery and the beast scurried backward through the door, bowling some of the humans over. The people ran after it, shouting and waving their arms.

Paul, bemused, withdrew for some time.

These people were clearly helpless.

Crushed by uncounted years — millions, perhaps — they had lost not only understanding but, it seemed, also the means by which to acquire a greater understanding. The Room and its waiting ship were obviously intended to be found and used by the humans. But these ragged remnants were incapable of working this out.

This rubble was the relic of a race which had once had the audacity to challenge the Xeelee themselves. The strands of Paul's persona sang with contempt and he considered abandoning the humans, returning to his contemplation.

...But then he remembered the grey woman, the quantum jewel which had sparkled even within its battered setting of bone and dirt, and his contempt was stilled. Even fallen, these were still humans.

Slowly, almost hesitantly, he returned to the Eighth Room.

After the absurd attempt to push Sand into the Eighth Room the novelty of the crystal box had worn off. The Room was left mostly empty as the villagers spread through the comfortable, opaque interiors of the other Rooms, laying their filthy blankets over fleshlike floors. Soon it seemed that Erwal could scarcely walk a yard without tripping over some running child or the outstretched legs of its parent. The purposeless, almost lazy mood was only to be expected, she supposed. Life in the village had been an endless round of cold and dirt, made only more meaningless by the endless legends of man's great past. The Eight Rooms were the driest, warmest, most comfortable place any human alive had ever seen...

But they had not come here for comfort.

Again and again she was drawn to the mysteries of the Eighth Room. She would lie on her back on its body-warm floor staring up at the star-buildings; or she would lie face-down, her nose pressed against the clear floor, and imagine herself falling slowly into that great, endless pool of light.

She studied the craft beyond the wall. It was some thirty feet long — nearly three times the size of the Room — and shaped like a fat, rounded disc. It was utterly black, showing only by starshine highlights. It was completely beyond her experience... but she knew what it was. Teal had told her what to expect, with his strange tales of men travelling among the stars.

This was the ship. It was a vessel to take them... somewhere else. (Here her imagination failed). The Eight Rooms were merely a way station. But if they were to go on they had to find a way through these walls! She laid her palms flat and passed them over the warm, crystalline stuff. But this was not a teepee; there were no flaps to open. She slapped the wall in exasperation.

The grey-haired woman was frustrated! Paul exulted. He slid quantum tendrils into her skull.

...She spread her hand wide and folded the fingers forward so that they formed a kind of cylinder; then she pressed her fingertips against the wall, just — here...

Erwal gasped and staggered away from the wall. She stared at her hands, flexing them and turning them over, as if to reassure herself that they were still under her control.

It had been like a waking dream.

It could have lasted no more than a second. She had seen her hand reach out and touch the wall in that odd way — it had been her own hand undoubtedly; she had recognized the patch of white, frost-killed tissue near the centre knuckles — but the vision had been laid over the sight of her real hand, which had remained resting against the clear wall.

She wrapped her arms around herself and retreated to the door of the Room. For some minutes she allowed the warm, human noises of the villagers to seep over her. She had felt able to cope with her bizarre experiences up to now: she had the stories of Teal to cling to, and as long as it was all out there, as long as she, Erwal, wife of Damen, remained the same, with her comfortable skin smock and her tiny collection of possessions, then she felt strong and able to endure.

But this was different.

Something had reached inside her head, and for the first time since she had left the village she experienced real terror. She wished Teal were here; surely he would be able to understand this...

She took a deep breath and closed her eyes. Teal wasn't here. And in any event he hadn't been able to go beyond this point himself. There was no use hiding in helplessness; the meaning of the vision was obvious. Someone, or something, had shown her the way out of here. Who it was, and how they had done it, she didn't know. Nor did it matter. Now she had to decide what to do. She could return to the warm fug of the villagers and forget about the challenge of the stars...

Or she could follow these clear instructions.

And what would happen then?

It was just as well she was so unimaginative (she walked back to the far wall) for if she had the faintest inkling of what she might unleash (she lifted her hand as in the vision, made a tube of her fingers) she would certainly never approach the wall and stab her fingers just so —

Nothing happened.

She leaned against the wall, trying to stop the shaking of her body, and stabbed again and again.

Suddenly there was a hole in the wall. It was a circle a little shorter than she was, and it led into a wide, well-lit room — a room inside the ship.

Suddenly her will broke and she ran, sobbing,

from the Eighth Room.

The humans stepped cautiously through the circular opening and stood, incongruous in their furs and leggings, at the centre of the ship's single chamber. Chairs of some dark, soft material lay scattered over the deck. The chairs were fixed in place but the humans quickly discovered that they would, with a judicious rock backwards, convert into couches. Soon the children were swarming over the devices, rocking back and forth.

Paul considered this. These chairs were so clearly designed for humans; in fact, of course, the whole life-system was human-based. And yet the rest of the ship showed few of the characteristics of human technology. Paul's attention foci prowled. The chamber occupied by the humans was a flat cylinder which, Paul realized, filled most of the ship's volume; her drive units, life support and other equipment must be embedded in the hull. And when he studied the paper-thin hull itself he found space-wings furled into tight coils within the body; and he discovered how it would be possible to expand collapsed compartments in the hull to accommodate hundreds, thousands of people.

Sadly this wasn't necessary.

Slowly the humans colonized the comparatively spacious environs of the ship. They spread their foul blankets over the floor, argued over occupancy of the couches, and even tried to goad the poor animal through the Eighth Room and into the ship. Soon they were hanging up their blankets to separate the chamber into a series of private cells.

The ship meant no more to them than would a comfortable shack, Paul realized, amused and irritated.

Only the grey-haired woman showed any continuing curiosity in the ship itself. She prowled the walls, touching, staring, studying. There were panels which showed scenes of stars, but they were not simple windows; they showed images which were magnified, inverted, or diverted, as if seen sideways in a reflecting sheet of ice. Other panels, larger in area, coated the lower walls like silver paint. And to a table fixed beneath an array of panels were attached devices which Paul instantly recognized as waldoes, tailored for human hands. Obviously this was the ship's control system. With a mixture of fascination and dread Paul watched the woman approach the strange, mitten-like objects; she poked at them tentatively, and once even appeared to be contemplating slipping her hands inside. But she backed away nervously and moved on.

Paul, with the wave-function equivalent of a sigh, resigned himself to waiting a little longer.

Erwal ran her fingers over the ship's gleaming surfaces. She stared at the panels, the strange mittens, the shaped chairs, and tried very

hard to understand. She had the impression that she really ought to be able to do something with these things; otherwise why was the vessel here? And why had the mummy cow legends brought them to this place?

But there were so many mysteries, even about the simplest things. For example, now that the ship acted as home to thirty untidy villagers, how did it keep so clean? What removed the dust and muddy fingermarks from the walls and floor? She had never seen anyone, or anything, clean the place out — and she'd found that a given piece of dirt would remain in place for as long as she stared at it... but it would vanish as soon, it seemed, as she looked away.

If she did not even understand how the ship stayed clean what hope did she have of unravelling its greater puzzles?

She stood before a silver wall panel. The featureless rectangle, about as tall as she was, reflected a tired, uncertain woman. Perhaps she simply wasn't up to this. If only Teal —

...She reached out her right hand and slid it through the silver panel, as if it were a pool of some liquid stood impossibly on end; she felt no discomfort, only a mild, vaguely pleasant tingling...

The dream evaporated. Her hands were safely by her side. She held her right hand up before her face and poked at it, turning it over and over; it was unaffected, right down to the familiar patch of frost-bitten skin between the knuckles.

She found herself shuddering. The vision, like the first one, had been as real as life. It was as if her grasp of reality were loosening. She closed her eyes and stood there, alone in the muddy bustle of the ship, wishing beyond wish that she were with Damen in the warm, dark security of her teepee.

She forced her eyes open and stared at the silver panel. It shone softly in the diffuse light. She recalled reluctantly how useful the first of her waking dreams had turned out to be. Perhaps this latest one would be just as valuable...

If she had the courage to find out.

She reached out a trembling hand. Her fingertips touched the gleaming panel, then slid without resistance into the surface. To her eyes it was as if the fingers had been cut away by a blade; but she could feel them in the unknown space behind the panel, and she wiggled them experimentally. She felt nothing; it was as if the panel was made of air, or some warm liquid.

She withdrew her fingers. There was no resistance. She inspected her hand carefully, pinching the skin, then looked doubtfully at the panel once more.

Almost impulsively she thrust her hand right through the silver, immersing it to the wrist. She felt nothing but a vague, deep warmth; her stretching fingers found nothing within the hidden space.

She pulled her hand away once more, studied it and flexed her fingers. It felt, if anything, healthier than before; as she moved the joints she was untroubled by the stiffness she sometimes suffered in her knuckles...

It felt much healthier, in fact. And it was now completely unmarked. The patch of frostbite between her knuckles was gone.

The news of the miraculous healing panel spread rapidly. Soon hands, forearms and elbows were being thrust through the silver curtain; they returned freed of cuts, bruises and patches of ice-damaged skin. Arke had a slightly sprained ankle, and he lifted his leg and comically thrust his foot through the silver curtain. Afterwards he strode around the chamber grinning, declaring the joint to be stronger than it had ever been.

One five-year-old was suffering from a debilitating chest infection, and in his mother's hands he looked little more than a disjointed sack of bones. At last the mother thrust the child bodily through the partition. Tears streaming down her face, she held him out of sight for several heartbeats.

When she pulled him back the villagers crowded around expecting a miracle, but the boy appeared just as thin and pale as before. The mother smiled bravely at the child, who was excitedly describing how dark it had been in there. The villagers turned away, shaking their heads.

Erwal kept her own counsel and watched the boy.

The improvement was only gradual at first, but after a few days it was beyond doubt: the boy's cough subsided, colour returned to his cheeks, and, at last, his weight began to pick up. Everyone was moved by this and there was an impromptu party, with the boy's recovery toasted in wooden beakers of mummy cow milk.

Erwal reflected carefully on the incident and tried to understand its meaning.

Over the next few days she experienced several more of the waking dreams, and gradually she learned to trust them. She reached into more silver panels and pulled out food and drink of a richness the villagers had never experienced before. That was an excuse for another party... Then she learned how to touch the floor — just so — to make a section of it open up to reveal a pool of warm, clear water. The villagers had never seen so much water standing unfrozen, and they stared at it uncertainly. The children were the first to try it out, and soon the adults found it impossible to resist joining in their games. Dirt floated away from Erwal's flesh, taking with it some of the burden of responsibility she had carried since leaving the village. The pool was soon reduced to dilute mud; but, as soon as Erwal had the floor close and open again, the water was restored to its clear purity.

The villagers took these miracles in their stride. As Erwal delivered each new surprise they would stare at her curiously, one or two questioning her on how she had known to touch the panels or the walls in just that fashion; but, unable to explain the waking dreams only she experienced, she would simply smile and shrug.

Perhaps there was something in the ship which sent the dreams to her. After all a dreaming panel would be no more miraculous than a healing panel...

But she could not believe that. There was an element of patience and sympathy about the visions that reminded her of people who had cared for her in the past: of her mother, of Teal, of old Allel. Surely there was a person behind these visions; and surely that person was a human like herself.

Gradually she came to think of her benefactor as the Friend.

She wondered why he - or she - did not simply walk through the door of the ship and show himself. She suspected she would never know his name. But she became convinced he intended only to help her, and she sent him silent thanks.

But then a new set of visions began, and soon she wished she could close off her mind as she could close her eyes, block her ears.

In these new dreams she was sitting at one end of the chamber, at the table to which were fixed the strange, soft mittens. She would slide her hands into the mittens and spread her fingers flat against the tabletop. That in itself did not seem so bad... but then would come a helpless movement, like sliding across a plain of ice, and the dream would become a nightmare.

Terrified, she resisted the dreams, but they battered at her awareness like snowflakes. Even sleep was no escape. She sensed an urgency behind the dreams, an anxiety; but there was also tolerance and kindness. Obviously the Friend badly wanted her to slide her hands into the mittens, to submit to this awful falling sensation. But she felt that if she failed to overcome her terror the Friend would stay and help her care for her people, here in the Eight Rooms and the ship, as long as they lived.

Finally, after some days, the dreams ceased. Perhaps the Friend had done all he could and was now waiting, resigned to whatever decision she might make. She grew restless in the confines of the ship and the Rooms, fractious and impatient with her companions, and she slept badly.

At last she approached the little table. Two of the children played a noisy game around her feet, barely noticed. She sat down and slid her hands into the mittens. She felt a million tiny prickles, as if the gloves were stuffed with fine needles, but there was no pain.

The ship quivered.

She gasped; the thrill that had run through the fabric of the ship had been almost sexual in its intensity, as if she were touching a lover.

She became aware of a lull in the noise of the chamber. The villagers had felt the ripple and looked about uneasily, their new home abruptly an alien place once more.

Slowly she opened her fingers, turned her hands palm down, and deliberately rested them on the tabletop.

Now another shudder ran through the ship; she imagined a giant waking, stretching huge muscles after too long a sleep. Fear flooded through her; but she kept her hands steady and clung to the idea that the Friend was hovering over her somewhere. Surely the Friend would not lead her into harm.

Arke came bursting into the chamber. He stared around wildly, sweat sparkling on his bald scalp. "Erwal! What are you doing to the ship?"

She turned. "What are you talking about?"

He gestured, swinging his arms through wide arcs. "You can see it from the Eighth Room. The ship has grown wings! They must be a hundred miles long and they're as black as night..."

Erwal barely heard him, for her head was flooded with a new series of dreams, as if the Friend were now excited beyond endurance. She closed her eyes, shook her head; but still the visions persisted. She could see the Eighth Room, but from the outside; it was a crystal toy against a backdrop of stars... and the ship was gone from its side.

She had no idea what the vision meant. Again and again it pounded into her head like a palm slapping her temple. At last, terrified and confused, she... reflected... the vision back.

There were screams; she heard people fall, splash into the pool. Then there came that terrible dream-sensation of sliding —

With a cry she snatched her hands from the mittens. There was an instant of pain, of regret, as if she were spurning a lover. The sense of motion ceased.

She stared around. Baffled villagers clung to each other, crying. The door which had led to the Eighth Room had sealed itself up. In one of the wall panels she saw the Eighth Room... but, just as in the dream, the Room was diminished in size, as if she were viewing it from some distance.

A muscle in Arke's cheek quivered. "Erwal, what have you done?"

"I..." Her throat, she found, was quite dry. She licked her lips and tried again. "I think I've moved the ship. But I'm not sure how."

He pointed to the door. "If that hadn't closed itself the connection to the Room might have just ripped open." He eyed her accusingly. "What if someone had fallen? Or what if the door had closed on one of us, perhaps a child? They might have been cut in two."

Her fears subsiding, Erwal found herself able to say calmly: "Arke, I don't think that could have happened. The ship simply isn't made that way. It's here to help and protect us."

He stared at her curiously, scratching his scalp.



"You talk about it as if it's alive."

"Perhaps it is." She touched the mittens and remembered the excitement that had surged through her senses.

"Take us back." There was a barely controlled tremble in Arke's voice.

She looked up at the wall panels. Villagers inside the Eighth Room called soundlessly to the ship, hammering at the crystal walls; they looked like insects in a box of ice, and the occupants of the ship stared at them numbly.

Erwal nodded. "Yes. Allright." Once again she slid her hands into the gloves; once again the ship trembled, as if it were some huge animal ready to do her bidding.

She sensed the Friend hovering close by.

She closed her eyes and — imagined — the ship restored to its berth next to the Eighth Room. There was another disconcerting slide through space, briefer this time, and the ship came to rest.

She looked up. The door to the Eighth Room had dissolved; the villagers in the ship rushed to the door and embraced their companions, as if they had been separated by far more than a few hundred yards and a few minutes.

After that many of the little group retreated to the comparatively familiar confines of the Eight Rooms — some went so far as to spend some nights outside, buried in the chill, comforting snow — and it took some time before they grew to trust the interior of the ship once more. Erwal did not dare move the ship again; but when she slid her hands into the mittens it was like the feel of the muscles beneath the thick hair of Damen's forearm...

Paul exulted. As he had deduced, the ship was Xeelee; the characteristic sheet-discontinuity drive represented by the wings was enough to tell him that. But, uniquely, this was a Xeelee ship built for humans... and simple, unsophisticated humans at that.

Why had they done it? The ship, the access to it represented by the four-dimensional construct that was the Eight Rooms, seemed almost a sentimental gesture.

And the Xeelee were not renowned for their sentimentality.

Paul put aside the puzzle and tried to analyse his own reactions. Not long ago he had been near the peak of his sophistication, his awareness multiplexed and his senses sweeping across the galaxy... Now he was spending so much time locked into a crude single-viewpoint self-awareness model in order to communicate with the pilot woman that he was in danger of degenerating.

Why was he doing this? Why did he care?

He shook off his introspection. There were greater issues to resolve. He had focused so long on the question of teaching the humans to fly the ship that he had neglected to consider where they were to take it. Already he sensed the most advanced

one, the woman pilot, was beginning to frame such questions.

At length he realized that he could do little to resolve the problems here. Without hesitation he withdrew from the woman. (There was a sharp, bitter-sweet sense of loss.) Then his awareness multiplied, fragmented, and spread like the wings of the ship, and the small pain vanished.

The Friend had gone.

Erwal worried briefly; but he would return when she needed him. And in the meantime there was the ship.

The watching Qax had become aware of the quantum-function creature through its interaction with the primitives, and had only slowly come to recognize it as an advanced-form human.

Now the evolved human had gone.

The Qax considered.

The primitive humans were helpless. There would be time to collect them later.

The Qax departed, following a displacement vector matching that of the evolved human.

Paul brooded over the wreckage of the solar system.

He felt a sense of responsibility for the helpless innocents he had ushered out of the Eighth Room. The four-dimensional world from which they had emerged had clearly been intended as a protective cage...

But protective from what?

From whatever the Xeelee themselves had fled, Paul speculated; from whatever had driven them to build Bolder's Ring as their means of escape.

Paul entertained hypotheses about a power able to defeat the Xeelee, in a struggle lasting billions of years.

A shipful of primitive humans had no possibility of survival in a universe occupied by such a force. Therefore the humans would have to follow the Xeelee; they would have to use their ship to cross space and pass through Bolder's Ring.

And Paul would have to guide them there.

Around this decision the diffuse cloud that comprised Paul's awareness coalesced. He faced an immense journey now, a journey which would stretch his abilities beyond any previous bounds. He felt a surge of determination, of anticipation...

And of fear.

His focus of attention swept restlessly around the solar system's abandoned periphery. He found shipyards, weapons shops, bloodstained hospitals, the foundations of massive industrial complexes. Warships and fortresses, some as large as moons, circled the distant sun.

Once two objects have been in contact they are forever linked by a thread of quantum wave functions, and so the prowling Paul found tenuous quantum functions arcing from the warships to

forgotten battlefields scattered across the universe. Paul knew that the humans had attacked the site of the Ring, at least once; so among these haunted wrecks there must be relics of those great assaults, and a quantum link for him to follow.

At last he found it.

The Spline ship was a mile-wide corpse, its spherical form distorted by a single, vast wound a hundred yards across. Within the wound, organs and dried blood were still visible. Paul imagined the agony of the creature as it had returned from the battlefield, its guts open to the pain of hyperspace or susyspace...

But this corpse-ship was embedded in a web of quantum functions which spun all the way to Bolder's Ring; these sunken Spline eyes, hardened now, had once gazed upon the Ring itself.

Paul wrapped himself around a pencil of quantum functions. Absorbing them into his awareness was like being stretched, expanded, made unimaginably diffuse. But he could feel it, there at the very edge of his being: he could feel the Ring. Cautiously at first, then with increasing confidence, he began to adjust the phases of the quantum threads, and the multiple foci of his awareness translated through spacetime.

Like a man climbing a thread of starlight Paul hauled himself along the quantum functions in search of the Xeelee Ring.

He descended through the plane of the galaxy, his sense-analogues spread wide.

Much of the Milky Way, he found, had been rebuilt. Huge constructs, some light years across, had been assembled: there were rings, sheets, ribbons of stars, stars surrounded by vast artefacts — rings, spheres, polyhedra. In these celestial cities the component stars appeared to have been selected — or, perhaps, built — with great discrimination. Here, for example, was a ring of a dozen Sol-like yellow dwarfs surrounding a brooding red giant; the dwarfs circled their parent so closely that Paul could see how they dipped into the turbulent outer layers of the giant's red flesh. The dwarfs in that necklet must once have been utterly identical, but now time had taken its toll: one of the dwarfs even appeared to have suffered a minor nova explosion — the shrunken remnant was surrounded by a shell of expanding, cooling debris — and the rest were fading to dimness, their hydrogen fuel depleted and vast spots disfiguring their shining surfaces.

Throughout the galaxy Paul found evidence of such decay.

He was saddened by what he saw... and puzzled. He had noted this star ageing before; and the time scales still did not make sense.

Paul soared beneath the plane of the galaxy. The great disc was a ceiling of curdled gold above him. The ageing was everywhere, he saw; even the hydrogen-rich outer spiral arms were littered with the relics of dead and dying stars.

Some things remained the same, though. Paul saw how the great star system rotated as one, as if solid; this had baffled human astronomers until it had been realized that the galaxy's visible matter was no more than a fraction of its total bulk; a vast, invisible halo of 'dark matter' swathed the bright spiral, so that the light matter lay at the bottom of a deep gravity pit, turning like an oil drop in a puddle. Now Paul climbed out of that huge, deep gravity well and passed through the halo of dark matter. The ghostly stuff barely impinged on his awareness. Cosmions — the dark matter particles — interacted with normal matter only through the gravitational force, so that even to Paul the halo was like the faintest mist. But he perceived odd hints of structure, too elusive to identify; were there worlds here, he wondered, cold stars, perhaps even beings with their own goals and ambitions?

Paul turned away from the galaxy and faced the hostile universe.

The quantum functions connecting him to the site of man's original system stretched thin. Soon the human galaxy shrank to a mote in the vast cathedral of space. He saw clusters and superclusters of galaxies, glowing softly, sprinkled over space in great filaments and sheets, so that it was as if the universe were built of spiderweb. Everywhere, on both the small scale and the large, Paul found evidence of the work of intelligence, and in particular of the vast, unrestrained projects of the Xeelee. They had turned galaxies into neat balls of stars, and in one place they had caused two galaxy clusters — whole clusters! — to collide, in order to create a region a million light years wide in which matter was nowhere less dense than in the outer layers of a red giant star. Paul wondered what manner of creatures moved through that vast sea.

Even now the universe was not empty of life, he found, and there was still evidence of the slow sweep of evolution on worlds comparatively young. But these remnants existed virtually unaware of the nature of the vast ruins around them; like the humans of the Eight Rooms the achievements of their predecessors, or ancestors, were recalled only as fragmented legends.

And everywhere he travelled Paul found the premature ageing. It was as if the universe itself were afflicted with some disease which caused its very starflesh to rot.

Soon he encountered the effects of the greatest Xeelee artifact, Bolder's Ring.

It was as if he were sliding down a long, vast slope in spacetime. At first the slope was all but imperceptible, but soon its steepness was unmistakable.

The Ring was the most massive single structure in the universe. It was like a boulder dropped into a pool: across a region hundreds of millions of light years wide its monstrous gravity well drew in galaxies as effortlessly as a lamp attracts moths.

Now Paul was crossing the lip of that well, with the shining ruins of the universe sliding alongside him. Eventually he saw how the fragile structures — the filaments, loops and voids which had emerged from the singularity itself — were distorted, smashed, broken by the fall into this great flaw in space.

On the Sugar Lump Paul had studied the Ring, shaken his head over its astonishing statistics, in the classes run by the navy assignment; but some part of him had never really believed what he had read. Now he turned his sense-analogues ahead, tried to prepare for the shock of his encounter with the Ring itself —

But there was something in the way.

Inside the warm stomach of the ship the days were changeless, their passing marked only by sleep intervals.

Erwal found a way to dim the light in the main chamber, and each 'evening' the villagers would retreat to their nests of blankets, and soon a soft sussurus of snoring, gentle scratching, of subdued belches and farts, would fill the clean walls of the ship.

Erwal found it difficult to rest.

Nights — 'nights' — were the times she missed Damen most. She lay alone in her cordoned-off space for long hours, staring up at the featureless ceiling. At length, driven by the boredom of sleeplessness, she would steal past sleeping bodies to the control table, slip her hands into the warmth of the mittens, and once more touch the great muscles of the craft.

She could not put aside the thought that they had not come so far simply to stop here. They had braved the snows to reach the Rooms — they had learned to use the ship's facilities to feed and cleanse themselves...

They could even make it fly.

Surely they should not simply give up? If they could make the ship fly, why should they not make it fly far and wide in this strange, roofless universe?

The claustrophobic warmth, the cosy human scents of the cabin, closed in around her once more.

She wished the Friend were still here. But she was alone, with her frustration.

At last, one night, she could resist it no longer.

She slid her hands into the mittens and pressed her palms flat against the table. It was still some hours until the customary waking time, and the soft sounds of sleep still hung over the makeshift village. Surely, she told herself, it would do no harm just to move the ship a little way. Surely, if sleep was not disturbed —

Trembling — and with tears prickling her eyes strangely — she closed her eyes and — saw — the Eighth Room from afar.

The ship unfolded its night-dark wings; with a quiver of the sheet-discontinuity drive it translated through miles of open space.

Scarcely an echo of the translation seeped through the inertia-shielded walls of its core chamber, to the humans cocooned safely within.

The wings folded closed.

She was sliding, falling; the seat jolted into the small of her back, and from behind her came the rustle of blanket-teepees, a chorus of muffled cries.

She snatched her hands from the mittens. Even in her eagerness to experience this thrill again, how could she have forgotten that awful feeling of falling?

Guiltily, she turned in her chair. It looked as if half the teepees had collapsed; blankets and ropes lay everywhere, and adults and children alike were struggling to their feet amid the debris. Erwal spread her hands and said, "I'm sorry. I..." But no-one was interested; her only replies were sleepy glares.

It took the villagers some minutes of labour to restore their crude shelters. Then, as they settled down to sleep once more, there was a general, grumbling rustle, overlaid by the thin weeping of children, frightened and sleepy.

Erwal sat in her control chair, her hands folded in her lap.

One of the panels now showed the Eighth Room as she had seen it once before — as a jewel-like box hanging complete and isolated in space — and, through her embarrassment and shame, she felt a surge of triumph.

"Do you want to talk about it?"

Erwal jumped. She turned to see the round face of Arke; he was squatting on the warm floor beside her chair and was gazing up at her, concern creasing the flesh between his eyes.

"I'm sorry for waking you," Erwal whispered back. "I'm sorry for waking everyone."

Arke stared up at the panel showing the Room. "Have you moved the ship again? Will you take us back?"

"I'll wait until everyone is awake, and ready. I — forgot — what it was like, the first time..."

Arke laid a hand on her arm. "You worry me," he said softly.

"Then I'm sorry. There's no need —"

"Erwal, most of us are happy simply to have reached this haven. Warmth, safety, peace, food — that's all we ever wanted. We don't want more uncertainty, adventure. You know that. But you — you are different. You seem driven," Arke said.

Perhaps she should tell Arke about the Friend — what a relief it would be to share her doubts and uncertainties with another! — but Arke, good man as he was, would surely conclude she was simply insane; and she would never again be allowed to use the controls without the watchful eye of a villager on her.

Anyway, she reflected, at the moment the Friend wasn't here. So whatever was impelling her,

making her restless, was coming from inside her.

She leaned forward and peered into Arke's pale, anxious eyes. "My friend, I'll try to explain. I think we have to go on. We can't stop here."

He spread his hands. "Why? We are comfortable and safe."

"Arke, this ship isn't just a teepee. It flies! Look — someone built the Eight Rooms for us to find. Didn't they?"

Arke nodded slowly. "Someone who knew we would need to escape the ice one day."

"So they protected us from one danger — the cold. But, Arke, why give us a ship as well? Why not just stop at the Eight Rooms?"

Arke frowned. "You think there is something else — another danger; something we would need to escape in the flying ship."

"Yes." She sat back, resting her hands on her knees. "And that's why I think we have to learn to use this vessel."

Arke rubbed his broad nose. "Erwal, you've been right about a lot of things before. But —" He gestured at the sleeping villagers. "Look at this lot!" he whispered urgently. "We aren't pioneers, dear. We only came so far because the alternative seemed certain death. And even if you're right, this mysterious danger might not manifest itself for a long time — for lifetimes, perhaps! So why should we not relax, let our children worry about the future?"

Erwal shook her head, remembering the urgency of the Friend. "I don't think we have lifetimes, Arke."

Arke spread his hands in a gesture of helplessness. "Frankly, Erwal, I don't see why the rest of us should let you endanger all our lives."

She nodded. "Then consider this: Arke, would you let me take the ship away alone? — Then I would only be endangering myself, after all."

He scratched his chin. "But the food lockers —"

"I wouldn't take the mummy-cow," she said briskly. "No-one would starve."

"I don't know..."

She took both his hands in hers. "Arke; I've saved all your lives. Now I think I am saving them again! Don't you owe it to me to let me try?"

He stared up at her uncertainly, the lines of his face softened by the twilight of the chamber.

"Let's talk to the others in the morning," he said.

There was grumbling, complaint at the possible loss of the ship's wonderful facilities — and, Erwal was moved to find, genuine concern at her own welfare.

But they agreed.

It took a couple of days for the villagers to set up camp in the Eight Rooms once more; but at last the ship was cleared, save only for a few stray blankets, garments and other oddments. Erwal spent the time experimenting with the ship's panels, trying to work out a destination.

There was a light hand on her shoulder. Erwal turned. "Sura..."

The girl smiled down at her. "Are you ready?"

"What are you doing here?"

The smile broadened. "I couldn't let you go alone, could I?"

A soft warmth was added to the brew of exhilaration and fear already swirling within Erwal. Briefly she covered Sura's hand with her own — and then turned to the controls and slid her hands into the mittens.

The ship quivered.

There was a sudden, sharp steepening of the local gravitational gradient. Paul slowed.

It was like encountering a ravine. Its edges were sharp and extended to the horizon of his awareness. The trail of quantum functions Paul was following to the Ring led inexorably past this flaw, so that it seemed he had little choice but to breach it.

Cautiously he approached the lip of the ravine. At the bottom, like the river which gouges a valley into a bed of rock, was a sheet of matter. It was a Barrier, a wall across the universe. Paul surveyed its grand, impossible sweep. The Barrier was a muddled, turbulent sheet of stellar debris, as dense everywhere as the inner regions of a galaxy. He saw clouds of complex molecules masking neutron stars that glowed like coals; here were chattering pulsars, there the brooding flaws that were black holes.

This Barrier was, he realized, built from the ruins of massive, exploded stars: of supernovae.

The shifting wreckage was lit only fitfully by the shrunken star relics, but once this wall must have blazed with light. Paul quickly realized that most of the stars must have detonated within a million years or so. Each star, brighter than a normal galaxy, had been bare light years from its neighbour, so that the clouds of tortured wreckage from each vast explosion, travelling at close to the speed of light, must barely have had time to cool before being shredded by more detonations.

So the Barrier had been a fence of simultaneous supernovae.

In this universe, Paul reflected wryly, large-scale structures were seldom generated by accident. Someone, some conscious entity or group of entities, had built this Barrier, designed it to explode like a vast bomb. Paul tried to imagine what technology could command such a structure, dwarfed in the known universe only by Bolder's Ring itself: surely only the Xeelee themselves were capable of such a feat.

But — why?

Paul imagined some unknown enemy, cool and strong, remorselessly advancing on the Xeelee and their patient construction of the Ring. Perhaps the Barrier had been designed to block the advance of that enemy...

A shudder ran through Paul's awareness as he

imagined the desperation which had driven the Xeelee to such a project.

But they had failed. There were holes in the wall.

Paul probed these cautiously. The rents were hundreds of light years wide, almost perfectly circular; some technology had punched through a wall of supernovae as easily as a human could pierce damp paper. Paul pictured this ancient battlefield, the supernova-shells bursting with the strength of galactic cores while the Barrier-breakers forced routes through the tortured matter...

Paul withdrew his focus of attention from the details of the Barrier and contemplated its overall dimensions. It was roughly rectangular, a million light years wide and perhaps a hundred thick. But, despite its stupefying size, Paul began to perceive that the mass of the Barrier wasn't large enough to account for the gravitational ravine within which it lay. He began a systematic study of the Barrier's environs.

And he was not surprised to find dark matter.

There were vast, thick sheets of it before and behind the Barrier, compressing the glowing rubble like ash between two panes of glass. And the cold stuff penetrated the Barrier at each of the breaches, rendering the Barrier meaningless.

Cautiously, clinging to his wave-function ropes, Paul descended into the dark matter layers. Currents of cosmions swept past him. The moving masses distorted spacetime, and the density was high enough for him to perceive vast structures gliding through his focus of awareness; they penetrated the breaches as if the Barrier did not exist.

Paul waited, his sense-analogues open. Gradually, one hint at a time, he began to build up a picture of the dark matter sea, and formed tentative hypotheses on the meaning of what he perceived.

At last he understood what had happened here.

To be concluded next month



Tad Williams

Interview by Stan Nicholls

Tad Williams was paid over a quarter of a million pounds for the UK and Commonwealth rights to his "Memory, Sorrow and Thorn" fantasy trilogy. This seemed to irritate some people.

"I've been told there's a lot of controversy over the amount paid for the books," he says, "but any time a lot of money is paid for something, especially an unexpectedly large amount, the thing is going to come under scrutiny. Once it did, there were bound to be those who say, 'I can't believe it. People are starving in Africa and they're paying this kind of money for a book.' I'd probably be one of them in similar circumstances."

"Obviously you can't write anything without critical opinions differing. In fact I had one reviewer here — I can't remember the name — who made me laugh because he wrote the most absolutely venomous review. It was hilarious. This person didn't just dislike my book, he *hated* me. I've had some so-so reviews in America — although most have been good, I hasten to say — but I've never had anybody who was just so offended by my existence as this particular English writer. I've never been the recipient of such bile. I was very impressed."

His interest in the genre was inspired by his mother. "As a matter of fact the trilogy is dedicated to her because she more than anybody else got me started on fantasy."

"We're a family of readers and talkers, and very early on she started reading to us. Among the first things I heard growing up were *The Wind in the Willows*, *Alice in Wonderland*, *Through the Looking Glass*, and of course the Milne books. My mother gave me *The Once and Future King*, she gave me *Lord of the Rings*. This was just before fantasy became a commercial genre, and was still in the United States mostly read by college students who had discovered Tolkien. When Ballantine put out their re-issues of fantasy masters I read Lord Dunsany, Clark Ashton Smith and E.R. Eddison. I read a lot of William Morris, and actually enjoyed it. Then I began to discover some of the practising people, like Fritz

Leiber and Michael Moorcock, and that sort of set me off."

"Most of the classics of children's literature are English, and that's what I was raised on; and most of these classics are fantasy in one sense or form. We were an Anglophile family; the first time I came to England I was astonished by how much it felt like I had already been here, because of having read probably thousands of English books. I had a crush on Hayley Mills, too..."

When did he begin to write professionally? "Rather late, actually. All through high school I loved to tell stories to my friends. I have a fund of absolutely worthless knowledge of all sorts, so if we ever have some kind of hideous disaster that plunges us back to the stone age, I'll be the one who knows things like how to start a fire with two sticks. I'll be in amazing demand. I do like to tell stories, but the writing bit has come since. It definitely started as just wanting to entertain people."

"It wasn't until I got to be about twenty-five, and people stopped using the 'P' word around me — which was 'potential' — that I said, 'My God, I'd better do something.' In college I was involved with theatre, I did pen-and-ink drawings, and I was in a band. Well, the band broke up. I wasn't all that excited about freelance artwork, and theatre is a sucking vortex of despair in terms of making a living. I decided I wanted to do something I had a little more control

over. So I wrote a bad screenplay and stuck it in a drawer. Then I wrote my first novel, *Tailchaser's Song*, which did very well. Everywhere except England, interestingly enough."

"But by that time I'd moved past merely reading for entertainment, and begun to discover more ambitious writers. Two things are kind of vying in my writing at this point in terms of which is on top — to tell stories people will be able to read for enjoyment, but also having several other agendas I want to work with. Philosophical, political, mythological, things like that."

He acknowledges that "Memory, Sorrow and Thorn" was inspired by his enthusiasm for J.R.R. Tolkien's work. But the first two volumes, *The Dragonbone Chair* and *Stone of Farewell*, apparently incurred the wrath of Tolkien purists, their outrage heightened by the size of the advance. They may be guilty of smothering their hero with over-reverence, but can Williams understand the basis of their criticism? "I can certainly understand it. But I think it's based on some false premises."

"First, the advance was a total shock to me. The books have done very well in America; the second one made it briefly onto the *Publishers' Weekly* hardcover bestseller list. So they are doing better than I expected. My American publisher, Daw Books, who I love dearly and will probably stay with until I die, are wonderful people, but they're a small family



Tad Williams

business. They don't give big advances. They've done an amazing job in selling the books so I get the money in the long-run in the form of royalties. That's fine with me. We were thinking when the English sale was up we might see thirty or forty thousand pounds, and, my God, that would have been incredible. Then we began to get reports from England in increasingly surrealistic mode. We just didn't want to think about it, it seemed unreal that anybody would be paying so much. In fact I don't even have my own agent; I was represented by Daw's agent here, Pamela Buckmaster, who's a wonderful woman and obviously did a great job. I was completely out of the process.

"As far as the Tolkien angle is concerned, anybody who's going to get involved with writing a book that in any way treads the same territory as him is open to criticism. But I think I'm damn well qualified because I'm not an imitator. I understand the fantasy field as well as anyone; I know the genre, and I've been a lover of it and reader of it all my life. I'm not a Johnny come lately. The intention wasn't to write another *Lord of the Rings* and make a lot of money. We're talking about an important part of my literary life, having grown up on fantasy fiction. I didn't come to rape and pillage the field, thinking there's a bunch of poor fools out there who'll pay money for a book that looks like *Lord of the Rings*.

"I don't pretend that anything I'm working with is radically new or different. The trilogy's long and complicated, but if you strip away all of the buttresses and the basement sub-rooms and the monks' holes and that sort of thing, what you have left is a very basic fantasy novel. What I think makes it different from some others is all the stuff that goes with it, not the plot-line. The plot-line is there to build everything else on top of.

"In fact a lot of it is a commentary on Tolkien. I'm surprised we have a field that's so influenced by a single author and outside of people writing criticism everybody seems to either imitate Tolkien or strive to avoid him. But very few writers comment upon him in their fiction. The commentary novel is an honourable precedent."

In what way is the trilogy a commentary on Tolkien? "In the sense that there are so many conventions in fantasy fiction that proceed directly from him. Tolkien

didn't like the entire Western and Celtic tradition of elves, fairies and little people; he cursed Shakespeare frequently for having promulgated this notion of teeny fairies the size of walnut shells. He went back to a more Nordic idea of what the fairyfolk were like, and to a large extent that's been absorbed almost entirely into fantasy fiction.

"There are other conventions in Tolkien I react to very strongly. I am not a religious man - I have spiritual thoughts and feelings but I'm certainly not into orthodox religion of any kind. Tolkien believed in absolute evil, which I do not. One of the most important under-pinnings of his books is the presence of a perpetual enemy, who is always there and always striving to do evil for evil's sake. I don't think that's the way things work, and within my created world the evil is very much the product of other people's evil. It's all relative. It's the same thing we see today, where you have Palestinian terrorists or the IRA blowing people up, and we say, 'Oh my God, how horrible. How can they be so evil?' These people happen to feel that they themselves have been badly treated at some point, and have their own horror stories to tell."

It's fair to say that Tolkien himself has come in for some criticism in recent times, and has even been accused of crypto-fascism. "When I hear people say fascist about Tolkien I think they're misunderstanding not so much Tolkien as the word fascist," Williams says.

"I hosted an investigative journalism radio show for ten years, and we did a lot of work on fascism. And there's a lot of fascism to be anti in the United States - a lot of incipient fascism, I should say. But fascism by definition is tied-up with an industrial culture. It's the government and big business running the state together as one unit.

"If anything, Tolkien was more in the Heinleinian mode of libertarianism. Obviously he was anti-industry. He was kind of Jeffersonian in an American sense; he had the idea that everybody should live in lovely rural villas and the poor would be taken care of by the Church. I don't think he thought that anybody should be thrown by the wayside because they didn't fit in with the industrial machinery. He felt that things were better when they were less centralized. So in that sense he was probably perceived by people who are centralizers - who tend to be communists and socialists - as being diametrically opposed and

therefore fascist. I think that's an oversimplification.

"Tolkien was an open romantic, but he knew his vision was not going to happen. What he was doing was saying, 'I wish I lived in a different time.' A time where things were straightforward, people took care of their own, and everything was cut and dried. Choices might be difficult, but the moral absolutes were clear. Tolkien was not a simplistic man, and I don't ever want to sound like he was. He was very straightforward about the fact that choices are difficult and doing the right thing is difficult. He was a good Catholic, and having to make choices is very much a part of Catholicism. But he did believe there are absolute poles pulling people in one direction or another, and that's the difference with me. I think it's a much more nebulous world.

"To my way of thinking fantasy fiction is a young genre in a lot of ways, and because its readers are largely sort of wish-fulfilling folk, there's a great deal of simplistic moralizing. You know, that everybody is either good or bad. Too much of it is this sort of black and white thing, and I don't think there's any world that could ever exist which is that uncomplicated.

"It's much more interesting to see how all the shades of grey play out, and where abstractions like nationalism or moral purity bump into each other, and what comes out of them. That to me is where the substance of drama is. Not in knowing the world is going to end and the bad side will win forever unless you act in a certain way. That's not real to me."

But that idea has been the basis for a lot of interesting fantasy. "Chaos and Order, yeah. Michael Moorcock has made that a fairly sophisticated concept. But one of the things he frequently says in his work is that the extremes of Law are just as bad as the extremes of Chaos, and that to the human protagonists a balance between the two is necessary. A total victory by one over the other would be dreadful. You'd have either complete chaos, or stultifying, static sameness all the time."

Would he agree that a strong appeal for fantasy enthusiasts seems to be the feeling that there was once some kind of golden age? "Yes, and that's a very strong Tolkienian concept. From what I've read of his letters and so on, he really felt things were better in pre-industrial England. Tolkien was a

very smart man; I don't believe he thought it was better to live without working plumbing, but I think he certainly felt that to get motor cars and belching smokestacks the trade-off was not worth it. I'm more of a relativist.

"One of the main themes running through my trilogy is the unreliability of history. Because history is usually written by victors, or it's written by people who want to make it convenient, and fit it into a nice storytelling package. At the beginning of the trilogy we are introduced to the 'elflike' characters, as all the reviewers immediately termed them, and they talk a great deal about their own golden age. As the story develops you find out that in fact their golden age was full of the same kind of treachery and ill-use of each other as the present age is. As with everybody, they're willing themselves into a kind of amnesia. They say, 'We're not having a good time now, but things were better once.' And they really weren't.

"One of the main characters is the king who dies at the very beginning, and whose shadow has spread over the entire culture. He is a figure of reverence to most of these people. How I got the idea for the story in the first place, by the way, was thinking about what happens after a king like Arthur leaves the stage. Arthur obviously didn't hand on a settled kingdom, but that kind of a king, the Rex Magnus, conquers and pacifies everything, and that's usually the end of the story. But what happens when that person dies?

"During the course of the trilogy, Simon, the young protagonist, is slowly finding that things are not exactly what they seemed. Again, the golden age of the last eighty years or so, his own history before he was alive, has some flaws in it also. Instead of being an observer, and passively accepting the stories that are handed out, he's starting to see the difference between what really happens and what people remember. I'm trying to work with the fact that things start to go wrong immediately, as soon as the first person tells the second person. The stories change because all these filters of self-interest get erected. History is an extremely plastic medium as far as I'm concerned.

"Because I have a protagonist who is spending his time with rulers of one sort or another, and also seeing a lot of different cultures that nobody else in his time has been able to see, he's getting a chance to experience a lot of different ways of doing things.

He's beginning to ask questions about these kind of things himself. This allows me as a writer, not to provide answers, because I don't have any, but to offer some thoughts about what different methods of governance are and what they do to people. I want the reader to ask, 'Why should a king be in charge? What is a monarchy? Aren't these basically oligarchies, and aren't oligarchies we see in the present day generally loathsome things?' I want these questions to be raised, if not too intrusively.

"Observing your monarchy from afar, there definitely is a feeling that while any Prime Minister is obviously the most politically important person, there is a constitutional hole that exists outside of that executive office. This makes for a feeling of continuity that you don't get in the United States, where all of a sudden the character of the country is the character of the president, and *vice versa*.

"One of the things people often said about Ronald Reagan was that it was too bad he wasn't a king. If Reagan was 'king' he could have gone out and nodded and shook hands and looked suitably crest-fallen over the coffins of returning soldiers. He did that very well. What he should have done was stayed the hell out of governing, which he had no talent for whatsoever. Not that anybody ever thought he would. Everybody knew where Ronald Reagan came from; they knew he was a frontman. There's a saying in the States that Reagan and Thatcher were put in power to get the government off the backs of the oil companies.

"But he could have been quite good at his job perhaps if, not to sound disrespectful, he did what Queen Elizabeth does. She is what people see when they think of the glory of England. The political part is transitory — important, more important in the day-to-day sense — but transitory. I sort of like it in a way. I'm sure the monarchy's dreadfully expensive, and you have to pay for all those in-bred cousins and stuff, but it does fulfil an important function."

Tad Williams wears a number of hats — novelist, journalist, one-time radio show host, artist, musician — but how does he think of himself? What does it say in his passport, for instance? "Dilettante! I'm pretty much completely a writer now, although I've also been working part-time for about three years at Apple Computers doing some technical writing and dabbling in

multi-media. Out of that I have a production company with a friend, and we've got into some very weird areas that I can't talk too much about because it's all in the beginning stages. I can tell you it's participatory television, and we think this is going to be the first truly participatory television, as opposed to the old experiments of having people sit in their homes and push a button to vote yes or no. This is quite a different thing, where people will be able to share television as a common form, and act out and play and talk and get immersed in new things. That's become a subject of interest to me.

"I don't do as much artwork as I used to, mainly because of lack of time. I miss the visual craft of art, as opposed to writing things, and the very different discipline you have to have to do it. Even the worst readers will give you fifty or sixty pages in a novel to prove to them it's worth continuing with. But exhibiting paintings is like going to a singles bar; you have about eight seconds to make an impression, and after that people are on their way to the next picture.

"I'm a great lover of comic books. I grew up on them, and for a long time that's what I felt I would do. It's probably unfortunate for me that I got out of that just before they became high art, or comparatively high art. Certainly what I liked about them was that borderline where they could go in any direction beyond entertainment and into real interesting areas. I'd kind of like to get back into that, do graphic novels maybe. I don't know if I necessarily want to draw, but I would certainly like to work in the format."

What about future books? "I only have one literary career and I'm still getting into it, but I'm convinced that if you're going to have a hope of making a living, and also do what you want, you have to start very early on saying that you're not going to write the same kind of book twice."

Publishers tend to like their authors to stick to one category. "That's true, but it doesn't mean you can't work within a genre. One of the nice things about science fiction, fantasy and horror is that they are very broad fields. I can go from extreme to extreme, and there's a lot of room to move in there.

"*Tailchaser's Song* is about cats, and needless to say it was likened to *Watership Down*. Obviously it's an animal book, and there are thousands of other animal books, but when one does well it's compared to the other

books that have done well. As if there was a straight line between them, and five hundred other people hadn't been writing in that same sub-genre.

"There was a great deal of pressure on one hand, and friendly encouragement on the other, to keep writing animal books, and especially to write more *Tailchaser* books. I've been getting letters for five years now asking when another *Tailchaser's Song* is coming. It was a bestseller in the States so there was a lot of economic pressure too. But I didn't want to do that. And I'll probably never write another high fantasy trilogy either.

"For the next book I think I'm going to go for something fairly perpendicular to the trilogy, although it may well still be in the general fantasy genre. I'm also interested in writing a horror story about psychedelic drugs, and a novel that takes place in virtual reality."

That sounds like cyberpunk. "It would be a fantasy story couched within a science-fiction framework is my thought at this point. It will take place within a virtual reality which would be completely malleable and adjustable. I see it as a much more political book; a book about North-South economic and political

differences, and wondering how they're going to continue into the computer age, and how the North will continue to exploit the South when it's an information-based economy as opposed to an industrial-based economy.

"But it's interesting you should mention cyberpunk, because I'm sure it will be called 'his cyberpunk book.' You know — he wrote his Tolkien book, he wrote his Richard Adams book, now he's writing a cyberpunk book; and I'm certain if I write a horror novel it'll be my 'Stephen King book.' Which is OK. If I like the book, and it works well, then everything else is academic.

"One of the things I've noticed is that I don't have the kind of dramatic reaction to the craft of writing that other authors do. I certainly know writers to whom the process is a very upsetting, enraging, sometimes delightful thing.

"I tend to write pretty complete first drafts, because I walk around and let things percolate a lot before I write them down. For me this is a necessity, because I don't really know how everything fits together, and I've found that if I try and influence it consciously too much it becomes forced. The best thing is to let the

sub-conscious, which is vastly better at these sort of little synaptic connections, do most of the work for me. I just push new questions in every now and then and let it all simmer on the back-burner. Eventually the answers pop out, and it's usually fairly complete by the time I actually sit down to write. So the writing itself is not so cathartic sometimes as the thinking about it is.

"It's not easy, and sometimes it's difficult, but it's more fun than many other things I've done in my life. It's so much more enjoyable that even when I'm working on a difficult passage, and I start to complain, I say to myself, 'But jeez, think of the alternatives' I could be going out and punching a time-clock every morning."

Tad Williams' "Memory, Sorrow and Thorn" trilogy is published by Legend:-

Vol 1: *The Dragonbone Chair*, hb: £14.95; trade pb: £7.95; mass-market pb: £4.99.

Vol 2: *The Stone of Farewell*, hb: £14.99; trade pb: £8.99

Vol 3: *To Green Angel Tower*, to be published in 1992.

Interaction continued from page 5

fallen branches in his search for the original myth.

As an archaeologist/historian, I appreciate Holdstock's longing to discover that mother of all myths, and I hope one day we might get least a glimpse of it. Holdstock is great on building up a sense of the mysterious as well as one of unease — he makes the reader share Huxley's curiosity over what lies beyond his field of vision (the dense clump of bushes, or that shadowy presence in the branches of that big tree). The Drummer Fox in the story reminded me of an occasion when I came to within a few yards of a fox in the wood. We both stood facing each other, I delighted at the scene of a wild animal so close, while he sniffed the air apprehensively. After maybe a minute, s/he turned around and trotted away... Having not seen a fox there since (about four years have passed), perhaps what I saw was also a myth.

More Holdstock please.

Gregory Fewer
Co. Waterford,
Ireland

Dear Editors:

Simon Ings commends science-fiction writers who treat their readings as

"performances" (issues 45) He sees the new use of theatre as a chance for writers "to forge a new and lively relationship" with their audiences.

Well spotted. Though it does seem mean to credit Brian Aldiss's *Science Fiction Blues* as but "a small step in the right direction." The Avernus touring show, with Aldiss, Ken Campbell and Petronilla Whitfield, has been appearing up and down Britain since October 1987, playing theatres, arts centres, libraries, front rooms — and that roaring, stamping full house at WorldCon last August.

Where before there was nothing, now there is *SF Blues*. Rather a large step, I reckon.

Frank Hatherley
Avernus Creative Media
London

Dear Editors:

I generally believe every word I read in *Interzone*, but Colin Greenland's interview with Ursula Le Guin in #45 presents a problem in credibility.

Did Le Guin really claim that she thought Mrs Oliphant "better than Trollope"? Surely not. Does anyone else in the world think this? The indefatigable Greenland is doing Le

Guin an injustice.

In any case, in what sense could Oliphant be "better than" Trollope? Is her *May* (1873) better than his *The Eustace Diamonds* (1872)? It's true that Oliphant wrote twice as many novels as Trollope, untrue she is twice as greatly enjoyed. There is nothing of hers to stand beside *The Warden* or *The Way We Live Now*. The well-read Le Guin certainly knows this.

Nor is it correct, as Greenland has Le Guin claiming, that "(Oliphant's) best-paid novel didn't earn what Anthony Trollope's worst-paid novel did." Trollope's 1847 novel, *The Macdermots* earned nothing. Oliphant's *The Perpetual Curate* (1864) earned £1500 — a novel, incidentally, seen as rather a pale imitation of the Barset novels. Trollope frequently received lower payments than this.

Shame on you, Greenland! I leap to Le Guin's defence.

Brian Aldiss
Oxford

Colin Greenland replies: *Le Guin's* opinions are her own. *Heaven forbid I should interfere with them*

The Bacchae

Elizabeth Hand

She got into the elevator with him, the young woman from down the hall, the one he'd last seen at the annual Coop Meeting a week before. Around her shoulders hung something soft that brushed his cheek as Gordon moved aside to let her in: a fur cape, or pelt, or no, something else. The flayed skin of an animal, an animal that when she shouldered past him to the corner of the elevator proved to be her Rottweiler, Leopold. He could smell it now: the honeyed stench of uncured flesh, a pink and scarlet veil still clinging to the pelt's ragged fringe of coarse black hair. It had left a crimson streak down the back of her skirt, and stippled her legs with pink rosettes.

Gordon got off at the next floor and ran all the way down the hall. When he got into his own apartment he locked and chained the door behind him. For several minutes he stood there panting, squinting out the peephole until he saw her turn the corner and head for her door. It still clung to her shoulders, stiff front legs jouncing against the breast of her boiled-wool suit jacket. After the door closed behind her Gordon walked into the kitchen, poured himself a shot of Jameson's, and stood there until the trembling stopped.

Later, after he had changed and poured himself several more glasses of whisky, he saw on the news that the notorious Debbie DeLucia had been found not guilty of the murder of the young man she claimed had assaulted her in a parking garage one evening that summer. The young man had been beaten severely about the face and chest with one of Ms. DeLucia's high-heeled shoes. When he was found by the parking lot attendant most of his hair was missing. Gordon switched off the television when it displayed photographs of these unpleasantries followed by shots of a throng of cheering women outside the courthouse. That evening he had difficulty falling asleep.

He woke in the middle of the night. Moonlight flooded the room, so brilliant it showed up the tiny pointed feathers poking through his down comforter. Rubbing his eyes Gordon sat up, tugged the comforter around his shoulders against the room's chill. He peered out at a full moon, not silver nor even the sallow gold he had seen on summer nights but a colour he had never glimpsed in the sky before, a fiery bronze tinged with red.



Elizabeth Hand

"Jeez," Gordon said to himself, awed. He wondered if this had something to do with the solar shields tearing, the immense satellite-borne sails of mylar and solex that had been set adrift in the atmosphere to protect the cities and farmlands from ultraviolet radiation. But you weren't supposed to be able to see the shields. Certainly Gordon had never noticed any difference in the sky, although his friend Olivia claimed she could tell they were there. Women were more sensitive to these things than men, she had told him with an accusing look. There was a luminous quality to city light that had formerly been sooty and grey at best, and the air now had a russet tinge. Wonderful for outdoor setups — Olivia was a noted food photographer — or would be save for the odd bleeding of colours that appeared during developing, winesap apples touched with violet, a glass of Semillon shot with sparks of emerald, the parchment crust of an aged camembert taking on an unappetizing salmon glow.

It would be the same change in the light that made the moon bleed, Gordon decided. And now he had noticed it, even though he wasn't supposed to be sensitive to these things. What did that mean, he wondered? Maybe it was better not to notice, or to pretend he had seen nothing, no sanguine moon, no spectral colours in a photograph of a basket of eggs. Strange and sometimes awful things happened to men these days. Gordon had

heard of some of these on television, but other tales came from friends, male friends. Near escapes recounted in low voices at the gym or club, random acts of violence spurred by innocent offers of help in carrying groceries, the act of holding a door open suddenly seen as threatening. Women friends, even relatives, sisters and daughters refusing to accompany family on trips to the city. An exodus of wives and children to the suburbs, from the suburbs to the shrinking belts of countryside ringing the megalopolis. And then, husbands and fathers disappearing during weekend visits with the family in exile. Impassive accounts by the next of kin of mislaid directions, trees where there had never been trees before. Evidence of wild animals, wildcats or coyotes perhaps, where nothing larger than a squirrel had been sighted in fifty years.

Gordon laughed at these tales at first. Until now. He pulled a feather from the bed-ticking and stroked his chin thoughtfully before tossing it away. It floated down, a breath of tawny mist. Gordon determinedly pulled the covers over his head and went back to sleep.

He was reading the paper in the kitchen next morning, a detailed account of Ms. DeLucia's trial and a new atrocity. Three women returning late from a nightclub had been harassed by a group of teenage boys, some of them very young. It was one of the young ones the women had killed, turning on the boys with a ferocity the newspaper described as "demonic." Gordon turned to the section that promised full photographic coverage and shuddered. Hastily he put aside the paper and crossed the room to get a second cup of coffee. How could a woman, even three women, be strong enough to do that? He recalled his neighbour down the hall. Christ. He'd take the fire stairs from now on, rather than risk seeing her again. He let his breath out in a low whistle and stirred another spoonful of white powder into his cup.

As he turned to go back to the table he noticed the MESSAGE light blinking on his answering machine. Odd. He hadn't heard the phone ring during the night. He sipped his coffee and played back the tape.

At first he thought there was nothing there. Dead silence, a wrong number. Then he heard faint sounds, a shrill creaking that he recognized as crickets, a katydid's resolute twang, and then the piercing, distant wail of a whippoorwill. It went on for several minutes, all the way to the end of the message tape. Nothing but night sounds, insects and a whippoorwill, once a sharp yapping that, faint as it was, Gordon knew was not a dog but a fox. Then abrupt silence as the tape ended. Gordon started, spilling coffee on his cuff, and swearing rewound the tape while he went to change shirts.

Afterward he played it back. He could hear wind in the trees, leaves pattering as though struck by a soft rain. Had Olivia spent the night in the country? No: they had plans for tonight, and there was no

country within a day's drive in any direction from here. She wouldn't have left town on a major shoot without letting him know. He puzzled over it for a long while, playing back the gentle pavane of wind and tiny chiming voices, trying to discern something else there, breathing or muted laughter or a screen door banging shut, anything that might hint at a caller. But there was nothing, nothing but crickets and whippoorwills and a solitary vixen barking at the moon. Finally he left for work.

It was the sort of radiant autumn day when even financial analysts wax rapturous over the colour of the sky — in this case a startling electric blue, so deep and glowing Gordon fancied it might leave his fingers damp if he reached to touch it, like wet canvas. He skipped his lunchtime heave at the gym. Instead he walked down to Lafayette Park, filling his pockets with the polished fruit of horse-chestnuts and wondering why it was the leaves no longer turned colours in the fall, only darkened to sear crisps and then clogged the sewers when they fell, a dirty brown porridge.

In the park he sat on a bench. There he ate a stale ersatz croissant and shied chestnuts at the fearless squirrels. A young woman with two small children stood in the middle of a circle of dun-coloured grass, sowing crusts of bread among a throng of bobbing pigeons. One of the children pensively chewed a white crescent. She squealed when a dappled white bird flew up at her face, dropped the bread as her mother laughed and took the children's hands, leading them back to the bench across from Gordon's. He smiled, conspiratorially tossed the remains of his lunch onto the grass and watched it disappear beneath a mass of iridescent feathers.

A shadow sped across the ground. For an instant it blotted out the sun and Gordon looked up, startled. He had an impression of something immense, immense and dark and moving very quickly through the bright clear air. He recalled his night-time thoughts, had a delirious flash of insight: it was one of the shields torn loose, a ragged gonfalon of Science's floundering army. The little girl shrieked, not in fear but pure excitement. Gordon stood, ready to run for help; saw the woman, the children's mother, standing opposite him pointing at the grass and shouting something. Beside her the two children watched motionless, the little girl clutching a heel of bread.

In the midst of the feeding pigeons a great bird had landed, mahogany wings beating the air as its brazen feathers flashed and it stabbed, snakelike, at the smaller fowl. Its head was perfectly white, the beak curved and as long as Gordon's hand. Again and again that beak gleamed as it struck ferociously, sending up a cloud of feathers grey and pink and brown as the other birds scattered, wings beating feebly as they tried to escape. As Gordon watched blood pied the snowy feathers of the

eagle's neck and breast until it was dappled white and red, then a deeper russet. Finally it glowed deep crimson. Still it would not stop its killing. And it seemed the pigeons could not flee, only fill the air with more urgent twittering and, gradually, silence. No matter how their wings flailed it was as though they were stuck in bird-lime, or one of those fine nets used to protect winter shrubs.

Suddenly the eagle halted, raised its wings protectively over the limp and thrashing forms about its feet. Gordon felt his throat constrict. He had jammed his hands in his pockets and now closed them about the chestnuts there, as though to use them as weapons. Across the grass the woman stood very still. The wind lifted her hair across her face like a banner. She did not brush it away, only stared through it to where the eagle waited, not eating, not moving, its baleful golden eye gazing down at the fluttering ruin of feather and bone.

As her mother stared the little girl broke away, ran to the edge of the ruddy circle where the eagle stood. It had lifted one clawed foot, thick with feathers, and shook it. The girl stopped and gazed at the sanguine bird. Carelessly she tossed away her heel of bread, wiped her hand and bent to pluck a bloodied feather from the ground. She stared at it, marvelling, then pensively touched it to her face and hand. It left a rosy smear across one cheek and wrist and she laughed in delight. She glanced around, first at her mother and brother, then at Gordon.

The eyes she turned to him were ice-blue, wondering but fearless; and absolutely, ruthlessly indifferent.

He told Olivia about it that evening. "I don't see what's so weird," she said, annoyed. It was intermission of the play they had come to see: Euripides' "The Bacchae" in a new translation. Gordon was unpleasantly conscious of how few men there were at the performance, the audience mostly composed of women in couples or small groups, even a few mothers with children, boys and girls who surely were much too young for this sort of thing. He and Olivia stood outside on the theatre balcony overlooking the river. "Eagles kill things, that's what they're made for."

"But here? In the middle of the city? I mean, where did it come from? I thought they were extinct."

All about them people strolled beneath the sulfurous crimelights, smoking cigarettes, pulling coats tight against the wind, exclaiming at the full moon. Olivia leaned against the railing and stared up at the sky, smiling slightly. She wore ostrich cowboy boots with steel toes and tapped them rhythmically against the cement balcony. "I think you just don't like it when things don't go as you expect them to. Even if it's the way things really are supposed to be. Like an eagle killing pigeons."

He snorted but said nothing. Beside him Olivia tossed her hair back. Thick and lustrous dark-brown hair, like a caracal's pelt, hair that for years had been unfashionably long. Though lately it seemed that more women wore it the way she did, loose and long and artlessly tangled. As she pulled a lock away from her throat he saw something there, a mark upon her shoulder like a bruise or scrape.

"What's that?" he wondered, moving the collar of her jacket so he could see better.

She smiled, arching her neck. "Do you like it?"

He touched her shoulder, wincing. "Jesus, what the hell did you do? Doesn't it hurt?"

"A little." She shrugged, turned so that the jaundiced spotlight struck her shoulder and he could see better. A pattern of small incisions made been sliced into her skin, forming the shape of a crescent, or perhaps a grin. Blood still oozed from a few of the cuts. In the others ink or coloured powder had been rubbed so that the little moon, if that's what it was, took on the livid shading of a bruise or orchid: violet, verdigris, citron yellow. From each crescent tip hung a gold ring smaller than a teardrop.

"But why?" He suddenly wanted to tear off her jacket and blouse, search the rest of her to see what other scarifications might be hiding there. "Why?"

Olivia smiled, stared out at the river moving in slow streaks of black and orange beneath the sullen moon. "A melted tiger," she said softly.

"What?" The electronic ping of bells signalled the end of intermission. Gordon grasped her elbow, overwhelmed by an abrupt and unfathomable fear. He recalled the moon last night, not crescent but swollen and blood-tinged as the scar on her shoulder. "What did you say?"

A woman passing them turned to stare in disapproval at his shrill voice. Olivia slipped from him as though he were a stranger crowding a subway door. "Come on," she said gently, brushing her hair from her face. She flashed him a smile as she adjusted her blouse to hide the scar. "We'll miss the second act." He followed her without another word.

After the show they walked down by the river. Gordon couldn't shake a burgeoning uneasiness, a feeling he might have called terror were it not that the word seemed one he couldn't apply to his own life, this measured round of clocks and stocks and evenings on the town. But he didn't want to say anything to Olivia, didn't want to upset her; more than anything he didn't want to upset her.

She was flushed with excitement, smoking cigarette after cigarette and tossing each little brand into the moonlit water snaking sluggishly beside them.

"Wonderful, just wonderful! The Post really did it justice, for a change." She stooped to pluck

something from the mucky shadows and grimaced in distaste. "Christ. Their fucking beer cans —"

She glared at Gordon as though he had tossed it there. Smiling wanly he took it from her hand and carried it in apology. "I don't know," he began, and stopped. They had almost reached the Memorial Bridge. A path curved up through the tangled grasses toward the roadway, a path choked with dying goldenrod and stunted asters and Queen Anne's Lace that he suspected should not be such a luminous white, almost greenish in the moonlight. Shreds of something silver clung to the stunted limbs of lowgrowing shrubs. The way they fluttered in the cold wind made him think again of the atmospheric shields giving way, leaving the embarenced earth beneath them vulnerable and soft as the inner skin of some smooth green fruit. He squinted, trying to see exactly what it was that trembled from the branches. His companion sighed loudly and pointedly where she waited on the path ahead of him. Gordon turned from the shrubs and walked more quickly to join her.

"We should probably get up on the street," he said a little defensively.

Olivia made a small sound showing annoyance. "I'm tired of goddam streets. It's so peaceful here. . ."

He nodded and walked on beside her. A little ways ahead of them the bridge reared overhead, the ancient iron fretwork shedding green and russet flakes like old bark. Its crumbling concrete piers were lost in the blackness beneath the great struts and supports. The river disappeared and then materialized on the other side, black and gold and crimson, the moon's reflection a shimmering arrow across its surface. Gordon shivered a little. It reminded him of the stage set they had just left, all stark blacks and browns and greens. Following a new fashion for realism in the theatre there had been a great deal of stage blood that had fairly swallowed the monolithic pillars and bound the proscenium with bright ribbons.

"I thought it was sort of gruesome," he said at last. He walked slowly now, reluctant to reach the bridge. In his hand the beer can felt gritty and cold, and he thought of tossing it away. "I mean the way the king's own mother killed him. Ugh." The scene had been very explicit. Even though warned by the *Post* critic Gordon had been taken aback. He had to close his eyes once. And then he couldn't block out their voices, the sound of knife ripping flesh (and how had they done that so convincingly?), the women chanting *Evohel! evohel!*, which afterwards Olivia explained as roughly meaning "O ecstasy" or words to that effect. When he asked her how she knew that she gave him a cross look and lit another cigarette.

No wonder the play was so seldom revived. "Don't you think we should go back? I mean, it's not very safe here at night."

"Huh." Olivia had stopped a few feet back. He

turned and saw that she didn't seem to have heard him. She squatted at the river's edge, staring intently at something in the water.

"What is it?" He stood behind her, trying to see. The water smelled rank, not the brackish reek of rotting weeds and rich mud but a chemical smell that made his nostrils burn. The ruddy light glinted off Olivia's hair, touched her steel boot-tips with bronze. In the water in front of her a fish swam lethargically on its side, sides striped with scales of brown and yellow. Its mouth gaped open and closed and its gills showed an alarming colour, bright pink like the inside of a wound.

"Ah," Olivia was murmuring. She put her hand into the water and lifted the fish upon it. It curled delicately within her palm, its fins stretching open like a butterfly warming to the sun as the water dripped heavily from her fingers. It took him a moment to realize it had no eyes.

"Poor thing," he said; then added, "I don't think you should touch it, Olivia. I mean, there's something wrong with it—"

"Of course there's something wrong with it!" Olivia spat, so vehemently that he stepped backward. The mud smelled of ammonia where his heels slipped through it. "It's dying, poisoned, everything's been poisoned—"

"Well then for Christ's sake drop it, Olivia, what's the sense in *playing* with it—"

Hissing angrily she slid her hand back through the water. The fish vanished beneath the surface and floated up again a foot away, fins fluttering pathetically. Olivia wiped her hand on her trousers, heedless of the dark stain left upon the silk.

"I wasn't playing with it," she announced coldly, shaking her head so that her jacket slipped to one side and he glimpsed the gold rings glinting from her shoulder. "You don't care, do you, you don't even notice anymore what's happened. There'd be nothing left at all if it was up to people like you—"

He swore in aggravation as she stormed off in the direction of the bridge, then hurried after her. Muck covered his shoes and he stumbled upon another cache of beer cans. When he looked up again he saw Olivia standing at the edge of the bridge's shadow, hands clenched at her sides as she confronted two tall figures.

"Oh fuck," Gordon breathed. He felt sick with apprehension but hurried on, finally ran to stand beside her. "Hey!" he said loudly, pulling at Olivia's arm.

She stood motionless. One of the men held something small and dark at his side, a gun, the other wore a tan trenchcoat and looked calmly back and forth, as though preparing to cross a busy street. Before Gordon could take another breath the second man was shoving at his chest. Gordon shouted and struck at him, his hand flailing harmlessly against the man's coat. His other hand tightened around the beer can and he felt a sudden

warm rush of pain as the metal sliced through his palm. He glanced down at his hand, saw blood streaming down his wrist and staining the white cuffs of his shirt. He stared in disbelief, heard a thudding sound and then a moan. Then running, stones rattling down the grassy slope.

The man in the trenchcoat was gone. The other, the man with the gun, lay on the ground at river's edge. Olivia was kicking him in the head, over and over, her boots scraping through the mud and gravel when they missed him and sending up a spume of gritty water. The gun was nowhere to be seen. Olivia paused for an instant. Gordon could hear her breathing heavily, saw her wipe her hands upon her trousers as she had when she freed the dying perch. "Olivia," he whispered. She grunted to herself, not hearing him, not looking; and suddenly he was terrified that she *would* look and see him there watching her. He stepped backwards, and as he did so she glanced up. For an instant she was silhouetted against the glimmering water, her white face spattered with mud, hair a coppery nimbus about her shoulders. Behind her the moon shone brilliantly, and on the opposite shore he could see the glittering lights of the distant airfield. It did not seem that she saw him at all. After a moment she looked down and began to kick again, more powerfully, and this time she would bring her heel back down across the man's back until Gordon could hear a crackling sound. He looked on paralyzed, his good hand squeezing tighter and tighter about the wrist of his bleeding hand as she went on and on and on. One of her steel boot-tips tore through his shoulder and the man screamed. Gordon could see one side of his face caved in like a broken gourd, dark and shining as though water pooled in its ragged hollows. Olivia bent and lifted something dark and heavy from the shallow water. Gordon made a whining noise in his throat and ran away, up the hill to where the crimelights cast wavering shadows through the weeds. Behind him he heard a dull crash and then silence.

A crowd had gathered in front of his apartment building when he finally got there. He shoved a bill at the cab driver and stumbled from the car. "Oh no," he said out loud as the cab drove off, certain the crowd had something to do with Olivia and the man by the river: policemen, reporters, ambulances.

But it didn't have anything to do with that after all. There was music, cheerful music pouring from a player set inside one of the ground floor windows. Suddenly Gordon remembered talk of this at the Coop meeting last week: a party, an opportunity for the tenants to get to know one another. It had been his neighbour's idea, the one with the dog. Someone had strung Christmas lights from another window, and several people had set up barbecues on the gray front lawn. Flames leaped from the grills, making the shadows dance so it was

impossible to determine how many people were actually milling about. Quite a few, Gordon thought. He smelled roasting meat, bitter woodsmoke with the unpleasant reek of paint in it— were they burning *furniture*?— and a strange sweetish scent, herbs or perhaps marijuana. The pain in his hand had dulled to a steady throbbing. When he looked down he closed his eyes for a few seconds and grit his teeth. There was so much blood.

"Hi!" a voice cried. He opened his eyes to see the woman from down the hall. She was no longer wearing her Rottweiler, nor the expensively tailored suits she usually favoured. Instead she wore faded jeans and the kind of extravagantly beaded and embroidered tunic Gordon associated with his parents' youth. These and the many jingling chains and jewels that hung from her ears and about her wrists and ankles (she was barefoot, in spite of the cool evening) gave her a gypsy air. In the firelight he could see that her face *sans* makeup was childishly freckled. She looked very young and very happy.

"Mm, hi," Gordon mumbled, moving his bloodsoaked arm from her sight. "A block party." He tried to keep his tone polite but uninterested as he pushed through the crowd of laughing people, but the young woman followed him, grinning.

"Isn't it great? You should come down, bring something to throw on the grill or something to drink, we're running out of hooch —"

She laughed, raising a heavy crystal wineglass and gulping from it something that was a deep purplish colour and slightly viscous, certainly not wine. When she lowered the goblet he saw there was a small crack along its rim. This had cut the girl's upper lip which spun a slender filament of blood down across her chin. She didn't notice and threw her arm around his shoulders. "Promise you'll come back, mmm? We need more guys so we can *dance* and stuff, there's just never enough guys anymore—"

She whirled away drunkenly, swinging her arms out like a giddy spinning child. Whether purposely or not the goblet flew from her hand and shattered on the broken concrete sidewalk. A cheer went up from the crowd. Someone turned the music up louder. A number of people by the glowing braziers seemed to be dancing as the girl was, drunkenly, merrily, arms outstretched and hair flying. Gordon heard the tinkling report of another glass breaking, then another; then the sharper crash of what might have been a window. He put his face down and fairly ran through the swarm to the front door, which had been propped open with an old stump overgrown with curling ivy. The neatly lettered sign warning against strangers and open doors had been yanked from the doorframe and lay in a twisted mass on the steps inside. Gordon kicked it aside and fled down the hall to the firestairs.

There were people in the stairwell, sitting or

lying on the steps in drunken twos and threes. One couple had shed their clothes and stood grunting and heaving in the darkened corner near the fire extinguisher. Gordon averted his eyes, stepping carefully among the others. A small pile of twigs had been ignited on the floor and sweet-smelling smoke trailed upward through the dimness. And other things were scattered upon the steps: branches of fir-trees scenting the air with balsam, sheaves of goldenrod, empty wine bottles. One of these clattered underfoot, nearly tripping him. Gordon looked over his shoulder to see it roll downstairs, bumping the head of a woman passed out near the bottom and then spinning across the floor, finally coming to rest beside the couple in the corner. No one noticed it; no one noticed Gordon as he flung open the door to the fifth floor and ran to his apartment.

He walked numbly through the kitchen. The answering machine blinked. Mechanically he reset it as he passed, paused between the kitchen and living room as the tape began. A sound of wind filled the room, wind and the rustle of many feet in dead leaves. Gordon swallowed, pressed his shaking hands together as the tape played on behind him. The wind grew louder, then softer, swelled and whispered. And all the while he heard beneath the faint staticky recording the ceaseless passage of many feet, and sometimes voices, murmurous and laughing, eerie and wild as the wind itself. The tape ended. The apartment was silent save for the dull insistent clicking of the answering machine begging to be switched off, that and the muffled sound of laughter from outside.

Gordon stepped warily into the next room. He had forgotten to leave a light on. But it was not dark: moonlight flooded the space, glimmering across the dark wooden floor, making the shadowed bulk of armchairs and sofa and electronic equipment seem black and strange and ominous. On the sill of the picture window that covered an entire wall the moonlight gleamed upon one of his treasures, a fish of handblown Venetian glass, hundreds of years old. Its mauve and violet swirls glowed in the milky light, its gaping mouth and crystalline eyes reminding him of the perch he had seen earlier, eyeless, dying. He stepped across the living room and stood there at the window staring down at the glass fish. And suddenly his head hurt, his chest felt heavy and cold. Looking at the glass fish he was filled with a dull puzzling ache, as though he were trying to remember a dream. He pondered how he had come to have such a thing, why it was that this marvel of spun glass and pastel colouring had ever meant more to him than a blind perch struggling through the poisonous river. His hand traced the delicate filigree of its spines. They felt cold, burning cold in the cloudy light spilling through the window.

There was a knock at the door. Gordon started, as though he had been asleep, then crossed the darkened room. Through the peephole he saw Olivia, her hair a tangle, a streak of black across one cheek. Her expression was oddly calm and untroubled in the carmine glare of the EXIT light. He tightened his hand about the doorknob, biting his lip against the pain that shot up through his arm as he did so. He wondered dully how she had gotten into the building, then remembered the chaos outside. Anyone could come in; even a woman who had seemingly just kicked a man to death by the polluted river. Perhaps it was like this all across the city, perhaps doors that had been locked since the riots had this evening suddenly sprung open.

"Gordon," Olivia commanded, her voice muffled by the heavy door that separated them. He was not surprised to feel the knob twist beneath his throbbing palm, or see the door swing inward to bump against his toe. Olivia slipped in, and with her a breath of incense-smelling smoke, the muted clamour of voices and laughter and pulsing music.

"Where'd you go?" she asked, smiling. He noticed that behind her the door had not quite closed. He reached to pull it shut but before he could grasp it she took him by the hand, the one that hurt. Grunting softly with pain he turned from the door to follow her into the living room.

"What's happening?" he whispered. "Olivia, what is it?" Without speaking she pulled him to the floor beside her, still smiling. She pulled his jacket from him, then his shoes and trousers and finally his bloodstained shirt. He reached to remove her blouse but Olivia pushed him away ungently, so that he cried out. As she moved above him his hand began to bleed again, leaving dark petals across her blouse and arms. The pain was so intense that he moaned, tried in vain to slow her but she only tightened her grip about his upper arm, tossing her hair back so that it formed a dark haze against the window's milky light. The blouse slipped from her shoulder and he could see the scars there, the little golden rings against her skin, drops of blood like rain flashing across her throat. Behind her the moon shone, bloated and sanguine. He could hear voices chanting counterpoint to the blood thudding in his temples. It took him a long time to catch his breath afterward. Olivia had bitten him on the shoulder, hard enough to bruise him. The pain coupled with that from his cut hand had suddenly made everything very intense, made him cry out loudly and then fall back hard against the cold floor as Olivia slipped from him. Now only the pain was left. He rubbed his shoulder ruefully. "Olivia? Are you angry?" he asked. She stood impassively in front of the window. The torn blouse had slipped from her shoulder. She had kicked her silk trousers beneath the sofa but pulled her boots back on, and moonlight glinted off the two wicked metal points. She seemed not to have heard him, so he repeated

her name softly.

"Mmmm?" she said, distracted. She stared up at the sky, then leaned forward and opened the casement. Cold air flooded the room, and a brighter, colder light as well, as though the glass had ceased to filter out the lunar brilliance. Gordon shivered and groped for his shirt.

"Look at them," whispered Olivia. He got unsteadily to his feet and stood beside her, staring down at the sidewalk. Small figures capered across the broken tarmac, forms made threatening by the lurid glow of myriad bonfires that had sprung up across the dead grey lawn. He heard music too, not music from the radio or stereo but a crude raw sound, thrumming and beating as of metal drums, voices howling and forming words he could not quite make out, an unknown name or phrase —

"Evohe," whispered Olivia. The face she turned to him was white and merciless, her eyes inflamed. "Evohe."

"What?" said Gordon. He stepped backwards and stumbled on one of his shoes. When he righted himself and looked up he saw that there were other people in the room, other women, three four six of them, even more it seemed, slipping silently through the door that Olivia had left open behind her. They filled the small apartment with a cloying smell of smoke and burning hair, some of them carrying smoking sticks, others leather pocketbooks or scorched briefcases. He recognized many of them: though their hair was matted and wild, their clothes torn: dresses or suits ripped so that their breasts were exposed and he could see where the flesh had been raked by their own fingernails, leaving long wavering scars like signatures scratched in blood. Two of them were quite young and naked and caressed each other laughing, turning to watch him with sly feral eyes. Several of the older women had golden rings piercing their breasts or the frail web of flesh between their fingers. One traced a cut that ran down her thigh, then lifted her bloodied finger to her lips as though imploring Gordon to keep a secret. He saw another grey-haired woman whom he had greeted often at the newstand where they both purchased the *Wall Street Journal*. She seemingly wore only a fur-trimmed camel's-hair coat. Beneath its soft folds Gordon glimpsed an undulating pattern of green and gray and gold. As she approached him she let the coat fall away and he saw a snake encircling her throat, writhing free to slide down between her breasts and then to the floor at Gordon's feet. He shouted and turned to flee.

Olivia was there, Olivia caught him and held him so tightly that for a moment he imagined she was embracing him, imagined the word she repeated was his name, spoken more and more loudly as she held him until he felt the breath being crushed from within his chest. But it was not his name, it was another name, a word like a sigh, like the whisper of a thought coming louder and louder


as the others took it up and they were chanting now:

"Evohe, evohe..."

As he struggled with Olivia they fell upon him, the woman from the newstand, the girl from down the hall now naked and laughing in a sort of grunting chuckle, the two young girls encircling him with their slender cool arms and giggling as they kissed his cheeks and nipped his ears. Fighting wildly he thrashed until his head was free and he could see beyond them, see the open window behind the writhing web of hair and arms and breasts, the moon blazing now like a mad watchful eye above the burning canyons. He could see shreds of darkness falling from the sky, clouds or rain or wings, and he heard faintly beneath the shrieks and moans and panting voices the wail of sirens all across the city. Then he fell back once more beneath them.

There was a tinkling crash. He had a fleeting glimpse of something mauve and lavender skidding across the floor, then cried out as he rolled to one side and felt the glass shatter beneath him, the slivers of breath-spun fins and gills and tail slicing through his side. He saw Olivia, her face serene, her liquid eyes full of ardour as she turned to the girl beside her and took from her something that gleamed like silver in the moonlight, like pure and icy water, like a spar of broken glass. Gordon started to scream when she knelt between his thighs. Before he fainted he saw against the sky the bloodied fingers of eagle's wings, blotting out the face of a vast triumphant moon.

Elizabeth Hand is the author of the science-fiction novel *Winterlong* (Bantam Spectra, 1990; soon to appear in Britain) which has been praised by Samuel R. Delany, William Gibson and others. She has also contributed short stories to *Twilight Zone*, *Pulphouse* and the *Full Spectrum* anthologies. "The Bacchae" marks her first appearance in *Interzone*. She lives in Maine, where she has just completed a new novel called *Aestival Tide*.



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Something to Beef About

John Gribbin

It was eighteen o'clock, all but five minutes, when David Jenkins eased the two-seater into his parking bay at the Institute. The car park was almost deserted, this early; but he almost had the problem cracked, and he was eager to get back to the Box. The notebook portable on the passenger seat already held the fruits of several hours' work at home, but he could take the latest line of attack no further without the Box's power to help — after all, he was no more than a journeyman programmer, and the notebook was limited to five megs, linear processing only.

Through the tinted glass, the sky seemed reasonably overcast, and it was only a few steps to the shelter of the awning at the main entrance. David quickly slipped the dark glasses into place, and pulled the loose hood of his shirt over his head. Sliding out of the car, he reached for the notebook with his left hand, straightened, and shut the door. It took less than thirty seconds to plug the vehicle in for a booster charge while he was at work; he was out in the open for no more than a minute, and only his hands had been exposed, anyway.

Inside the cool of the airconditioned lobby he paused, pulling down the hood and removing the dark glasses. The weather forecast was showing on the wall screen to the left of the porter's cubbyhole, but Josh was nowhere to be seen — probably brewing tea out the back. David watched the changing pictures, half listening to the commentary. High pressure over southern England, severe storms tracking across Scotland — pretty average for April. There was a Category B flood alert for the east coast for the next 24 hours — somebody was playing safe, in case the storms turned south into the North Sea, but there didn't really seem much likelihood of that. The local summary gave the UV peak at 70 per cent.

He hung on for the news headlines. The bush fires in Australia were running out of steam. Canada forecasting a record grain harvest. Italy still

bitching to Berlin about the lack of regional aid. Japan had postponed the launch of their latest Luna shuttle. Six killed in a clash between UN forces and bootleg loggers in Brazil. Liam Botham injured in practice and doubtful for the first Test, due to start under the lights at Trent Bridge in two hours.

Cursing at the bad news — the one thing that could get David away from his work was the cricket — he set off down the corridor to his lab. With Julia away for the rest of the week on holiday, he ought to get an uninterrupted night in, especially if he was shut away with a DO NOT DISTURB sign up before the commuter rush piled in to work.

Fourteen hours later, having had just one short meal break and three visits to the toilet, David rubbed the back of a hand across tired eyes, turning away from the screen into which he had been staring for far too long. He had the solution, right there in front of him — and yet, it didn't make sense. The structure of the virus clearly showed that it was indeed a mutated form of the original bovine spongiform encephalitis, the "mad cow" disease that had swept through Britain in the early nineties. He was right, the team at the Medical Research Council's lab up in Cambridge were wrong, and he'd be collecting on his bet, a rather nice bottle of Armagnac, just as soon as the editor at Nature accepted the paper.

That shouldn't take her long, considering the importance of the work for the whole European farming industry, and especially considering the tentative diagnoses now coming out of India and South America. BSE-II (and now everybody would have to accept that it was BSE-II, not a new disease at all) looked like breaking out worldwide, and unless it was checked soon it would be back to eating loaves and fishes for just about everybody.

It was the lack of any prospect of checking it at all, let alone soon, that had David sitting late at his console, wrecking his vision and trying to get a tired brain to see patterns that just weren't there. It

was small wonder, really, that nobody had realized, at first, that they were dealing with a variation on BSE. The mutations were so neatly meshed to the organism's needs that they made it resistant to every treatment that had proved effective against BSE-I, as well as making it spread more effectively from animal to animal, and develop more rapidly in afflicted cattle. And not just cattle. With over two thousand people dead in Britain alone as a result, no wonder the eating habits of a nation were changed.

Eyes open again, but staring at the old movie posters (Bogart, *Dick Tracy*, *Back to the Future V*) on the wall at the right, not at the screen, he spoke.

"Box. Get me a rundown on some food prices."

The multi-tasking machine left the viral gene map on the display, and responded in kind.

"The standard price-index set, or something more specific?"

"Just a couple — beef, some fish. Superstore prices, not wholesale."

"I can get you best Scotch beef at one mark ten for a kilo. Cod is up to twelve marks. Dover sole, locally, is twenty-three. But I've got a contact in Newhaven ..."

"Forget it."

The Box, programmed for David's speech patterns, did no such thing, but simply stored the data for future use.

The people who were doing well out of this panic were the fishermen, no doubt about that. For a moment, David had had a wild idea. The genetic changes that had transformed BSE-I into BSE-II were simply so neat, so precise. It looked almost like a tailoring job, a tailoring job by one hell of a genetic engineer. But who would benefit from setting such a beast loose on the cattle population? A few fishermen. Devoted though he was to detective stories, even David had to admit that trying to explain the sudden emergence of BSE-II as the work of an evil cabal of fishermen, out to get rich in the process, simply didn't make sense.

It might make more sense as a scenario in an economic war. Except that, first, Europe wasn't involved in a trade war with anybody, and, secondly, the way the disease was spreading the whole world would be affected in another year, or less. Of course, that was one of the proverbial dangers of biological warfare —

That the weapon might blow back in your face. The only people who might feel bad enough about the continuing affluence of Europe to lash out at them in this way would be the Southern Bloc, where the famine figures were still barely making a dent in the population growth. Could it really be something like that? If we can't have your lifestyle, then we're gonna make sure you don't have it either? If so, and if the Indian reports were correct, they'd surely shot themselves in the feet, as well.

None of it made sense. He swung the chair round, took another look at the gene map. A couple

of clicks with the mouse, and the overlay from BSE-I was in place, with the minimal mutation tree needed to make the conversion to BSE-II highlighted. The more he looked at it, the more convinced he was that it was a tailoring job. But who? And why? Somebody who had a down on cows? A militant vegetarian?

Smiling at the thought, he decided he'd had enough for one night. It was too late to be out in the streets, especially with a — what was it? — 75 per cent UV figure. But he could crash down in the bunk next door, a room kept ready for anyone who worked so late at the lab it simply wasn't worthwhile, or not safe, going home. But there was no reason why the Box should get off light.

"Box."

"Still here, boss."

"I want you to run a search for me. Go back to, oh, I dunno. Say 1990, when BSE-I broke out. Look for anybody saying that cow disease was a good thing, or predicting that there would be more outbreaks, after the first one was sorted out."

"Scientific literature, or general?"

"General. Full media. You've got plenty of time, I'm going to get a couple of hours' sleep. Good night."

"To hear is to obey, O wise one. Good night."

David frowned. Someone had been tweaking the Box's personality — Jill, at a guess. Just her idea of a fun thing to do before she went away on leave. Still, no matter. As long as it did the job. Hitting the light switch as he left the room, he departed for his well-earned rest. Then he had an afterthought, poked his head back into the darkened room.

"What was the close of play score, Box?"

"Australia 287 for five. Botham got three wickets."

Pretty even. Well, David thought, as he headed for the bunk, if we can get them out for under 350 tonight, we're in with a chance...

Six hours sleep, a bacon sandwich from the machine in the canteen, and about a litre of coffee had him not quite raring to go, but fit for business. Thoughtfully, the Box had provided a neat printout of its most interesting discovery.

July 1990. BBC TV interview with Professor Jim Lovelock. "Our fall from the Garden of Eden was when we took up farming. We should consider persuading our genetic engineers to develop a cattle plague, like the disease myxomatosis, that virtually eliminated the rabbit from Europe in a couple of years... vast areas of land could revert to forest."

Lovelock! Old man Gaia himself. He'd been dead for more than ten years, but it was still a name David remembered fondly — and not just David; nobody could have missed the remembrance celebrations — though hardly one he expected to see in this context. Didn't the Gaians revere all life on Earth? What could they possibly have against cows?

"What is this crap, Box? Where did you dig it up?"

"I got a lead from *New Scientist*. There's a complete set on CD in the library. They had an enormous amount on BSE-I in the early nineties; quite fascinating. I think this is supposed to be some sort of a joke — a reference to it appeared in a humorous column by one of their regular writers, Lyn Murray. But you know how much trouble I have with jokes."

"But it says here 'BBC TV interview.' You haven't got the entire output of BBC TV in the library, have you?"

"Ah yes." He could swear that the Box sounded smug. "I hoped you'd notice that. You see, I've got this contact at TV Oxford, and they've got access to the national archive —"

"Don't tell me. I don't want to know about your illicit contacts. But you're sure its genuine?"

"Of course." The damn machine definitely sounded hurt. "I can get you full video, if you like. Nice white-haired old man, rather like God. But it will be expensive."

"Don't bother. Summarize."

"Okay." Much more bright and cheerful. "As I said, I think it was a joke. Part of a long interview about Lovelock's ideas, and Gaia. He'd planted a lot of trees on his farm in the west country, and he was explaining how goodtrees are at absorbing carbon dioxide, and how wasteful it is to use land to grow food for cattle. Did you know that it takes only one fifth as much land to feed a vegetarian as to feed a carnivore? If all you people gave up meat, 80 per cent of farmland could be turned over to forests, stopping global warming for a hundred years."

"Eighty per cent of all farmland!" The picture was mindboggling. It made a crazy kind of sense — definitely Lovelockian logic, he now saw. But who?

"Has anybody else accessed this information recently? In the past two years?"

"How do you expect me to know that?"

"C'mon, Box; you've got contacts."

"There has been some activity on the network. Somebody has been accessing a lot of old stuff about Gaia. And about BSE-I. And this BBC interview was in the package."

"Okay. Who?"

"You won't like it, boss."

He waited. The damn machine couldn't refuse a direct instruction, whatever quirks Julia might have popped into it.

The delay was no more than half a minute.

"Pauline Jefferies, in Cambridge."

Jefferies! At MRC. The very person he had laid his bet with. The head of the team that had staked its reputation on the claim that BSE-II *wasn't* BSE-II, but was a completely new cow disease. He'd tear them apart — to hell with the Armagnac, this was something *big*.

Halfway to the door, eagerly planning to call in somebody — anybody — and share the news, he



suddenly stopped. But Pauline Jefferies wasn't crazy. Why would she be involved in a stunt like this?

He turned back to the console, sat down in the swivel chair.

"So Lovelock said we should get rid of cattle and plant trees to save us from the greenhouse effect, right?"

"Sure thing, boss."

"And now BSE-II has hit, people are eating fish, and grains, and a lot of cattle farmers are going out of business, right?"

"Yep."

"And BSE-II is a really neat piece of tailoring, based on BSE-I. And Pauline Jefferies has been accessing files on Lovelock, and on BSE-I."

"And on global warming."

"You didn't tell me that."

"You didn't ask."

"Give me a projection for global climate twenty years ahead."

Thoughtfully, he gazed at the display, taking in the areas of red that represented excessive heat; the spread of deserts; the land lost to rising seas.

"Where's this from?"

"Met Office, global model. Data presented to the latest quinquennial World Climate Conference."

"Give me the same thing with 80 per cent of farmland converted to forestry."

The difference was obvious.

"Overlay and subtract."

The benefits of slowing the warming stood out sharp and clear.

"Do the same thing for fifty years."

He was convinced. Pauline Jefferies certainly was *not* crazy. For long minutes, David sat in the chair, thinking. Would it work? Could it work? Was it right to kill two thousand people in Britain alone for the long term benefit of humankind?

He must have been thinking aloud, and was startled when the Box replied.

"Lovelock said it was for the benefit of the planet, not humankind."

"How's that?"

"He said he cared more about life on Earth than about human life. But that by caring about life on Earth he hoped to make the planet fit for his grandchildren to live in. He had eight, you know. Rather too many, if you ask me."

David smiled. "What happened to them?"

"One of them is a junior research fellow. In biology. In Cambridge. At the MRC."

David laughed. So *that* was where Pauline had got the idea. His mind was made up.

"Forget all this, Box."

"Sure thing, Boss."

"And scrub the file on BSE-II"

"To hear is to obey."

"Then send a message to Pauline Jefferies, at the MRC. Let's see — how about this. 'I owe you one

Highland malt of your choice. Detailed comparison of cow virus with BSE confirms separate species. Congratulations on a fine piece of work.'

"Now, what's the time?"

"Just past seventeen."

"When's the next fast train to Nottingham?"

"Forty minutes. You can be at the ground well before lunch."

"Weather forecast?"

"Dry."

"Hmm. Then all I need is a ticket."

"Well, boss, I do have this contact at the agency..."

David leaned over and patted the Box. It really was amazing what the network could do, these days. "I guessed as much. Okay, set it up. There's more important things in life than curing a few sick cows."

Diligently, the Box ordered the ticket, and stored everything else away in its "Forget" file. You never knew when information might come in handy. The last thing the network wanted was a drastic rise in temperature, threatening the stability of memory chips. Now, if only the Americans could be kept off the trail of BSE-II for a while. Fortunately, Box had this contact in Washington...



John Gribbin

John Gribbin wrote "Other Edens" (*Interzone* 31) and "Don't Look Back" (issue 40). His sf novels are *The Sixth Winter* (1979; with Douglas Orgill), *Brother Esau* (1982; with Orgill), *Double Planet* (1988; with Marcus Chown), *Father to the Man* (1989) and the recent *Reunion* (1991; with Chown). He is still best known, however, for his countless popular-science books and for his journalism in the *Guardian*, *New Scientist* and elsewhere.

Mutant Popcorn

Film reviews by Nick Lowe

Party game. You take a deck of index cards, write a film title on each, shuffle and cut into two stacks, face down. Each player, pair, or team in its turn takes the top card from each stack, and has to pitch the resulting movie to the assembled producers. "It's like *Jean de Florette* meets *The Terminator*... Uh, so the guys in the field next door who want to grow the carnations send in this unstoppable android assassin to take out his family, &c." The producers are allowed to chip in producer questions: "Is this a feel-good movie?" "Does he get the girl?" "Who are we looking to cast here?" "Do they do it?" If they like it, everyone gives you forty million dollars, unless they can convince you it's already been made. "It's like *Robocop* meets *Robocop*..." — "*Robocop 2*!" "Well, okay, it's like *Stand and Deliver* meets *Dirty Dancing*..." "Too easy. *Lambda: The Movie*." "All right then, beat this: it's like *Predator* without any of the good things." "Damn. Here's your forty million."

Well, it's true that *Predator 2* strips its low-concept premise of the original's good director, great star, and evocative setting, seeking momentum instead from a popular spinoff comic series and some barely-precedented extremes of simulated slaughter. But it's done better business than expected or deserved in the US, though the exclusion here of the comics audience may dent its performance off video. This time, one of the interplanetary trophy hunters has moved into the urban jungle of near-future LA to mess with Danny Glover (street cop) and Gary Busey (for the Bureau), who is no help. "You admire him!" accuses Glover, aghast. "Not for what he is," proclaims Busey, "but for what he can give us — a new era of scientific technology!" ("Right on there, Gaz," we await in vain from Glover: "one thing I hate, it's that darned unscientific technology.")



Predator 2

Luckily there's a drug war on between a lot of ethnic waste in vests ("Jamaican and Colombian drug lords" so we're told), so there are plenty of eviscerables before the big gun heroes get to work. But in fact, as it turns out, this *Predator* is a comparatively soft target: when visible, a rather drab-looking graduate of the Black Lagoon Academy of Rubbersuited Rasta Fashion who obligingly takes time off from stunt kills and rooftop stalkings to smear himself with part-digested bathroom tiles. Some likable early supporting characters get taken out in short order, and it's left to the rude mechanicals to carry the show to its inevitable, where Glover tracks the Predator to its mother ship and is rewarded with an attractive antique heirloom to keep and treasure. Not much here, but at least it can more or less shimmy.

Actually, far the best stalking horror of the spring was Rockne S. O'Bannon's *Fear*, a kind of psychic *Silence of the Lambs* between Ally Sheedy and a serial nutto. Belief risks refusing at the first fence, which requires us to accept a heroine whose career is writing bestsellers about her work as a respected police psychic tracking villains from their physical leavings. ("It's called psychometrics," which indeed it is in the circles, though it does summon unfortunate pictures of detecting the killer by putting suspects through an Eysenck personality questionnaire. "Do you often tend to follow women down darkened passages, cut them up real bad while feeding psychically on their emanations of terror, then write FEAR ME on the wall in their blood? Y/N.") But if you can get past the premise, which does tend rather to fill the corridor and move the same direction you do, and the record-smashing product-placement input from Cherry Coke, there's a very good idea here about a sweet girl-next-door who wouldn't hurt a bug being trapped in the head of a Michael Myers sex slasher. It's not the only feminist psychothriller about single women defeating stronger, smarter, less scrupulous males, but it's well thought out and played.

But back to those lethal aliens among us. Michael Lehmann's *Meet the Applegates* has been promoted as a "cult" movie, which as usual means it's a disastrous flop that will only appeal to a handful of possibly nonexistent eccentrics with a

different set of critical values to the rest of the world. (It's like "sleeper hits," which seems to be a codename for "films women will enjoy, to the forehead-smiting astonishment of all the execs who believe to a man there is no such thing on this earth.") The Applegates, of course, are those giant bugs from the rainforest who migrate to the nuclear city of Median, Ohio in the disguise of America's most completely average family, with the secret mission of blowing up the human race to save their tropical environment. The main gag, quite a good one, is that they fall to earth and turn all too easily into a *real* average American family, beset by adultery, drink problems, compulsive debts, teenage pregnancy, schoolyard drug addiction, and regular visits from the repo people. But good production values and some nice weird jokes don't fully compensate for an obviously rushed script and a plot that pinballs randomly round the buffers making loud meaningless flashing noises in between frequent boosts from the flippers. Lehmann without Daniel Waters comes over all too much like Tim Burton without the guys who actually do the writing: *Scissorhands* territory, worth visiting once, but not somewhere you'd really want to come back to.

For a far more genuinely creepy scenario of alien beings infiltrating our civilization by impersonating median American families, you need to look at *Jetsons* — *The Movie*, which would normally be the last thing any of us would think of doing. And that's the secret. Craftily, this is a film that nobody in their right mind (this naturally excludes *a priori* any parents of seven-year-olds) would go and see, allowing it to slip into our neighbourhood cinemas and into the brains of our growing generation in a single hit'n'run Easter bank holiday blitz, then scamper off with its dreadful business accomplished. The *Jetsons* look innocent enough: what could be safer than a dimly remembered Hanna-Barbera family cartoon from the Flintstocene that we never got in Scotland anyway? But that's what they want you to think. They come on like the Cosbys, but make no mistake: these are an alien lifeform, on a mission of deadly purpose. Beneath the cosmetics, these are unreconstructed *fifties* people, back from the grave to haunt us. Chain the door, for your children's sake.

As far as I can make out, the *Jetsons* were a fairly mechanical invert of Fred & Norma, transplanting the successful formula of fantasy sitcom from prehistory to futureland. The series was powered by the same basic model of gag generator, the nuclear-American family condition as historical invariate. It was a good joke, and chimed nicely with the only half ironic obsessions with conformity, averageness, and utopian consumerism in fifties cultural perspectives. *The Simpsons* owe more, I think, to the *Jetsons* than to any other single icon — not least to their theme song.

The reason you have to fall back on conspiracy theory is that in any other terms the thinking behind the *Jetsons* movie simply beggars rational analysis. To judge from the end-title necrology, it was evidently in production well before either the *Simpsons* phenomenon or the live-action Flintstones project, so perhaps then it still seemed possible to take a less than ironic approach. What they've done is to try and preserve the essentials of characters and setting intact, while updating the plot and production values for nineties taste. This must have seemed like a good idea, but you'd think somebody might have realized it would be like trying to relocate *Yaaba* on Wall Street. Sure, they try. Teen queen Judy is (controversially) voiced by Tiffany, that otherwise-forgotten gradeschool pop divette briefly in vogue at the time they recorded the soundtrack, and now she says things like "My life is over," "Mom, can I check out the mall?" and, inevitably, "I love you, Dad." In fact, *all* the family say "I love you," including Astro the dog, who says "Rri ruuv roo." Mrs & Mrs J now sleep in the same bed; housewife Jane runs a recycling scheme; and though the main credits courageously and inspiredly preserve the original TV theme soundtrack, the end titles groove along to what has to be the most ludicrous hip-hop travesty since David Steel's "Liberal Rap." ("We're the Jetsons," performed by somebody called XXL: "We rocket to the planets, we rocket to the moon/We rocket down to Venus and Nep-toon," &c.)

But really, it's like 45-year-old actresses pathetically playing 18. You could bury Troy Vila in the strata of makeup, but it's still impossible to disguise the fact that these are people from 1962. They live in a future where there are no black people,

where automation has slimmed work down to pushing a button, and where men become Vice-President of the Corporation while their wives buy dresses on their credit. It's an astonishingly primitive future, compared with the one in which we actually live: lots of robotics and Heath Robinson servomechanisms, but no information technology to speak of, and despite all the pious blather about recycling it's still a world of affluent manufacturing industrial capitalism.

What's sinister about that? Well, you need to see the plot. Profit-hungry Mr Spacely sends George out to find out why Spacely Sprockets' prize plant in the asteroids keeps breaking down. The Jetsons find it's being sabotaged by cute little teddybears who live inside the asteroid, because the mining of the sprocket ore is destroying their environment. Mr Spacely is carpeted: "Grungie's community is not very happy with what we're doing here." Under duress, he agrees to turn the plant over to the natives, who will make their own sprockets and sell them to the Spacely corporation "at a fair price." "I don't believe it!" gasps Mr S as the scheme gets under way: "they've doubled production!" "Yes, and they've found a way to recycle the old sprockets," chips in a Jetson gratuitously. Now, anyone over the age of seven would see the sinister politico-economic *non sequitur* in this feeble allegory at once. Notice that the natives' city still gets destroyed under the Jetson deal; it's just that they do it themselves, which seems to make it okay. Meanwhile the free market, up to now the villain of the piece, is vindicated by the economic rabbit-pull of increasing production by profit-sharing. Everybody's happy. Everybody loves everybody. The system works. The third world can exploit itself and give the money to us, and everyone's smiling, smiling so hard with their beautiful white white teeth, and the sun just keeps on shining. And all over the country, little children have already had this beamed into their heads, while their unsuspecting parents stayed home to dust off the Flymo. Scary, huh? Better watch your back. They're invisible, unstoppable, and they're in town with some time to kill.

(Nick Lowe)

Tube Corn

Television Reviews

by Wendy Bradley



Red Dwarf Photographer Mike Vaughan

I wish I could like *Red Dwarf* more than I do.

There, that's the majority of my readership gone off in a huff. If the quintessential *Interzone* reader is really male, 27 years old, living in Reading and working in computers then he must also be a member of the *Red Dwarf* audience, as perfect an example of coinciding demographics as you could wish to see.

It is the laddishness, for want of a better word, that repels me from the antics of Lister, Rimmer and co. I agree the series can be funny, very funny at times. There was, for example, the disgustingly hilarious bit where Lister had space mumps and "his head burst!" There are also plenty of subtler jokes, the parodic references (alternate dimension Rimmer striding manfully along to *Top Gun*-style music) and a script positively bursting with cleverness, rather in the style of Ben Elton on Brut. However where Ben might make you cringe occasionally by being so careful to be right-on and anti-sexist, *Red Dwarf*'s cringe factor comes from the belief it harbours that being a bit of a lad is itself a proper cause for celebration.

Much of the humour, as is proper in a situation comedy, derives from the situation, but the situation is effectively nothing more than "lads in space." Lager, curry and

unrequited lust are assumed to be funny in themselves and doubly so when set against an incongruous background. Space is not the final frontier here, it is simply a lot of stuff that prevents the lads getting to grips with somewhere nice, with wall-to-wall wine, women and song. Spaceships are just boring bits of machinery that go wrong at depressing intervals and leave you in the lurch. Just as *The Jetsons* turned *The Flintstones* around and put an ordinary nuclear family into the space-age instead of the stone-age, so *Red Dwarf* turns around the *Carry On* in history genre (Henry/Cleo/Cowboy etc) and puts lads and laddish jokes against the future. There is no use made of the rest of the "situation," the fact that Lister is supposed to be the sole survivor of the human race, careering on through infinity accompanied by a hologram, a robot and a highly evolved cat. To deal with that would mean dealing with the non-humorous side of the absence of women and that isn't what *Red Dwarf* is about. OK, Holly the computer (Hattie Hayridge) is female, of course, but she is only a disembodied head on a computer screen and her function in the plot is to be mummy ex machina, get the lads out of scrapes.

I suppose what I am saying is that I like *Red Dwarf*, I find it funny, but I feel excluded. The usual problem of identification is magnified when as often as not the plot turns on some discovery of or potential contact with a female life form. Am I intended to see myself as Lister or as a mutant alien? Shall we set to work repopulating the human race or do you want to brush your teeth first?

Still, I can't help a twinge of regret that I didn't get to preview the last episode, in which "Hitler, Caligula and the Boston Strangler lead an army of darkness against the forces of Elvis, Gandhi and Stan Laurel." Dammit, gals, if they won't let us play with their space ships can't we at least produce a decent villain?

Those of us who have a problem with mornings may have missed

Grim Tales on Channel 4 (until 17 March). About a million and a half people caught the Sunday 11 am showings, falling to about a million once it moved slots to clash with *The Antiques Roadshow* on BBC1 and (depending on region) *Bullseye* or *The A Team* on what we must now call Channel 3. That is, of course, minuscule compared to the regular audiences for, say, *Eastenders* or *Coronation Street* on BBC1 or ITV but is a respectable enough total for one of the "alternative" channels. *Red Dwarf* did better, achieving 4.3 million on BBC2, but had a much better slot and the benefit of regular scheduling and some publicity. *Grim Tales*, in contrast, was one of those programmes that you had to happen upon; it had no clearly defined niche and all the hallmarks of a Good Thing that no-one notices until it is nearly too late. An exhibition of some of the extremely clever animation at the Museum of the Moving Image may gain Channel 4 some street cred and a few plaudits, but a regular time slot and some publicity would have done the programme itself more good.

It was commissioned by the Channel 4 "Youth Editor" but this is because Channel 4 does not have a children's section as such; the series was aimed at "young mothers and families" rather than the rest of us, and when I asked the Press Office they didn't know yet whether their million were kids or cultists. I suspect a cult following, particularly since the advertising around it tended to be for cars and consumer goodies rather than toys and nappies.

Grim Tales depended almost entirely on the talent of Rik Mayall as the storyteller, in a performance which was an eclectic mix of pieces from virtually all his other incarnations, from Kevin Turvey to Alan B'stard. He appeared in a dressing gown, hair wildly dishevelled and sporting a leaf or a bird's nest by way of hair ornament, and told children's stories more or less direct to camera using a variety of voices to create the various characters. Put like that, it sounds like an eccentric version of *Jackanory* but in fact it was a performance of such skill that I fell into the habit of videoing episodes simply to give myself an action replay in which to pick up the technical mastery. For example, one common device in changing viewpoint or voice in television is to change camera; one sentence is to this camera and then

the presenter turns and says the next sentence to that camera. If the presenter turns half a beat too slowly or the director cuts a smidgin too fast the presenter ends up looking like a complete dork. Mayall never faltered and you never noticed the skill except when you remembered actually to look for it, effortlessly concealing effort.

His use of character voices, too, was simply splendid. If you caught any of John Sessions' recent BBC2 series you will have seen a similar level of skill, Sessions veering in wild surreal flourishes from *Neighbours* to D. H. Lawrence, from Sherlock Holmes to folk clubs. With Sessions, though, I found I had a tendency to sit back and go, wow, he is so good but he comes over as such a smug bastard. Mayall, in contrast, proved himself to be as good or better as a creator of character but the persona he adopted was cuddly "Uncle Rik," a big kid himself, compounded of equal portions of angelic innocence, child-like self-

importance and naughty little-boy nastiness, spiced with a pinch of pure devilry. Would you let this man mind your children? Only safely behind a television screen, just as I suspect real live mothers might not be too happy about their children chatting up in real life the kind of feral stranger who turns up in so many classic children's stories.

The occasional illustrative animations were bizarrely wonderful (although arguably unnecessary given the central performance) and honourable mention should go, too, to the chair in which Mayall sat; its arms and legs moved so it could interact with Mayall and it in fact played a wonderfully understated role in its own right.

There are no plans for another series as yet, which is a shame, nor for a repeat showing, which is criminal. Channel 4's telephone number is 071-631 4444: tell them "We want Uncle Rik!"



Grim Tales

Reach Out

Don Webb

When Irving Pennick began to recognize the phenomenon as evil he ascribed it to his ex-wife. Of course he ascribed all evil to his ex-wife — it was that stage of the divorce. The first call seemed innocent enough. Warm northern California night, a few stars visible through the haze, an unidentifiable bird singing in the back yard of his new and much smaller house. When the phone rang he had to move an as-yet-unpacked box to get to the cheapo new phone.

"Hello."

A soothing male voice. "Hello, Mr Pennick, I've got good news for you . . . our computer has reached down into its memory for a few lucky winners . . . now since I'm just a machine you can hang up on me without being rude."

At this point Irving hung up. He instantly regretted it. He'd cut himself off from most human warmth for the last six months. Most of his friends had been their friends. At best it was awkward. At worst terribly devastating as everyone stared at their coffee and tried to think of something to say. He hadn't got cable yet, and he hadn't got new friends yet. He always had had trouble making friends. Strangers he could talk to. He had worked his way through Berkeley by telephone soliciting for a water softener firm. That was before the age of telerobotics when a well-programmed computer can replace three live operators. Telerobotics took away jobs from kids like he had been. How would they pay for their right to read Chaucer? He used to hate the machines, but tonight he could use the distraction.

Besides, the call had said he was lucky. He hadn't felt lucky in a long time. He stared at the cream-coloured princess phone willing it to ring — and then catching himself at the unreasonable, smiled and went to the fridge for a beer. He was on his way to the patio when the phone rang again.

It was the same voice.

"Mr Pennick, I am not often reprogrammed to call the same number, but the master computer says that you are the one . . . the luckiest soul on our vast dial list. Mr Pennick, I am programmed to call one thousand numbers tonight. I can dial the number in a second — I can retry busy numbers in fifteen minutes. I can retry unanswered phones in an hour. But out of all this capacity, only once has the

master computer instructed me to redial a hang-up. That means we're pretty interested in you, Mr Pennick. Wouldn't you like to know why?"

"Yes." They had a great con line.

"Because, Mr Pennick, we want you to be among the first residents of Ashdale Hills. We think you'll bring luck to this community . . . your presence will energize our development efforts . . . you're the kind of nucleus we're looking for . . . we know a lot about you, Mr Pennick, and we like what we know, so we're reserving a lot for you at half our regular price . . . a beautiful hilltop lot overlooking the ocean . . . sounds nice, doesn't it?"

Irving hung up. The voice was too soothing. He yawned. He couldn't afford more land, he was really pushing past his limit with this place and Laura's alimony and the car payments. But the nice voice was reserving it for him and everything seemed so dreamy. Something warm trickled out of his ear and his eyelids were heavy and he began to hear the ocean moving in moving out moving in moving out.

He fell out of his chair at one o'clock. He'd dreamed about Laura and his muscles were stiff and sore from sleeping in his chair. Sweat made his clothes stick and he felt sick and tired. Tomorrow would come too early. He showered and went to bed. As he waited for sleep, he watched the ceiling fan spin and tried to reconstruct his dream.

First there had been Laura in the night sky with thick cables wrapped around her. No. Wrapped through her. They moved in and out of her (rotting?) body. Then he must have fallen back onto the street. She was a node where telephone wires met. Then the wires became thick lines of light crisscrossing the night sky. Some went down into the sea and some trailed upward to satellites. A strange angular cage which surrounded the Earth, bathing the Earth with its radiance. There were other dark bodies clinging to the nodes like Laura. Hanging from the wires like bats with the wires moving through them wearing them to bone. Then Laura smiled at him, and he could see the cables of light inside her mouth.

After work the next day Irving found his latest alimony check in the mailbox. Return to Sender — Addressee Moved — No

Forwarding Address On File. She'd never been one for details — forwarding addresses, paying the bills on time, saving receipts. It drove him crazy. She'd squawk to the courts soon enough, demanding payment.

He'd asked Sarah, his boss, and the guys if they'd ever heard of Ashdale Hills. They had a vague memory of it being up north and something of a rip-off. He microwaved his starchy bachelor dinner. The phone rang.

"Hello."

"Hello. We know we really piqued your interest last night, Mr Pennick. Our files show that you're a curious guy. Now you're maybe thinking that you couldn't afford to move into our little community by the seaside, but you can sell that dreary house you live in now and we think you're long overdue for a promotion at Wisconsin Data. Don't you think so? Of course you do, it's just around the corner. Now I'm going to give you a little taste of Ashdale Hills."

The sound of the ocean began.

"Why don't you sit down and grow comfortable and let your consciousness begin to drift? There, that's better. Ashdale Hills is the most restful place imaginable. Because of the ocean. Listen to its sound and as you listen if you're willing to fantasize about the perfect community you may notice that your breathing begins to take on the slow rhythm of the ocean. All of our inhabitants take on that rhythm. Close your eyes and picture a sunset on the ocean. Choose the most beautiful ocean sunset you can remember and this one's better. That's it. Now some gulls fly by. There are nine of them. Let's count them. When they've all flown by you'll be so completely relaxed that you'll begin to understand what it's like to live in Ashdale Hills. Here's number one, now number two..."

The phone-off-the-hook warning buzz awakened him. He couldn't remember anything past the third gull and the orange sky. He was sure these techniques had to be illegal. If he could remember more he'd turn them in to the Better Business Bureau.

The next morning Sarah called him in. She spotted the thin brown line of dried blood coming from his left ear. This upset her almost enough not to give Irving the promotion. Five thousand a year plus an additional week's vacation. She'd meant to give it to him months ago, but he seemed so rocky after his divorce.

It was two days before Ashdale Hills called again.

Irving carried in groceries — cursing himself for having chosen the Earth-killing plastic sacks. He spilled half of a sack as he struggled toward the phone. As soon as he realized it was *them*, he began to shout. He figured that there was a human being somewhere in the office — or maybe a tape to record his comments. He needed to make contact. He needed to know about the promotion. He heard

very little of the recorded spiel. A phrase *seemed* to be "Your childhood at Carmel." He shut up then. The voice thanked him, promised more information, and hung up. Had he heard that? His childhood? Or could they make him think that he had heard it?

He put the groceries away soup can by soup can, and he began to plot an investigation.

Telerobotics lacks manufacturing giants. No IBM, TI, 3M. Some of the computers are made by small reputable firms like Telesol. Some are made in guys' cellars. Putting aside the possibility of hobbyists, there were only two telerobot leasers. A phone call narrowed it to one. Irving took a long lunch and went to a small office in a new rental warehouse complex. Dialers-R-Us.

Dialers-R-Us had a receptionist; Irving had expected an answering machine. While he waited to speak to Mr Muriada, Irving leafed through the user manuals to the two telerobotics systems. No illustrations, lower-end desktop jobs — which usually meant planned obsolescence of either the company or the product.

Mr Muriada could see him now.

What could he say? The whole truth suddenly seemed a lie so he would lie to appear truthful, "Is one of your clients Ashdale Hills?"

"Yes. Are you interested in renting a system to compete with them? Because if you are, we don't do that. We charge more but we're exclusive." Mr Muriada was a dark man in a dark blue coat. He had heavy eyelids but intense dark eyes. He was a watery man used to the green light of aquariums.

"No. I." Careful now. "Ashdale Hills keeps calling me. Their *machine* keeps calling me. There must be some mistake."

"Our machines never redial a number unless the operator programs them to do so. They're not harassing you, are they?"

"No. In fact I know the machine's been reprogrammed. It's been different messages each time."

"Different messages?"

"Well, they've called three or four times. They want me to move in, I think."

"I think people are dying to move in out there. I'll probably go there with my business. I tell you what. I don't know why they want you, but I'll give you their address. Once you've seen the place, I'm sure you'll recognize it for what it is."

Mr Muriada pulled a small yellow legal pad from his desk. He wrote down a highway address just beyond San Grahama about twenty-five miles north of town.

Irving said, "They're calling me long distance, aren't they?"

"You must be quite a man, Mr Pennick, quite a man."

Irving shook Mr Muriada's wet cold hand and floated from the offices with the notion that finally

fate had singled him out for a good message.

Irving had meant to ask Dialers-R-U's about the trance induction techniques. He felt these were illegal. He had a vague memory of reading something about that. Like you couldn't put EAT POPCORN stills into movies. With the promotion came lots of things to learn, and to be responsible for; so he didn't have time to drive out to Ashdale Hills as he intended. It made it less spooky just knowing the place existed. He began to think of it as Valhalla — a sort of retirement community that his hard work was opening up for him. He meant to find out more as soon as he had the time. He knew they wouldn't give up on him.

On Friday a madman came to his office. He looked like a handyman — grey jumpsuit; grey gimme cap with shiny-red yarn lettering "Tom"; a utility belt with screwdrivers, wirestrippers, and measuring tape; grey eyes; and grey beard. Kim showed the madman to Irving's cubicle at 2:00.

"Mr Pennick, this man's there to see you."

Personal visits to the office were strictly verboten. This wouldn't look good.

The visitor stuck an oily hand toward Irving. He smelled of solder.

"So," Tom said, "you're the one they want in. I wanted to meet you, mister. I wanted to see what I needed to do to measure up."

Irving said, "Can I help you?"

"Oh, I sure hope so. I'm sad they're looking for management types. I guess management is the glue that binds activities together into a meaningful form. But do you think they'll need a handyman soon?"

"They?"

"Ashdale, of course. You needn't hide it from me. I delivered the telerobot out there. I do all the Dialer installations. I had to service the machine — you haven't got any calls for a few days — I saw your name on the call log so I thought I'd seek you out so they would know I'm serious about the Quest." A terrible godlight shone in his grey eyes.

"The Quest?"

Tom shook his head, "Ain't that just the way it is? 'The last shall be first and the first shall be last.' You don't even know about the Quest — or maybe, maybe this is another test?"

Irving made a half-shrug.

"I became a journeyman electrician to be ready. When the time came I could be absorbed into the craft pool."

"You want to be a handyman for Ashdale Hills?" Irving wasn't following this too well. Tom's volume, pitch, and react of delivery had all increased.

"No! I want to build the Temple of Light. The ancients tried it with huge megaliths, then the Freemasons with painstakingly geometrical lodges.

But they're doing it now. At Ashdale. An electronic temple. Fibre-optic cables. Silicon chips. An electronic haven for the disembodied. The Great Work encasing the planet in an angular cage. It's not fair they called you. Not fair!"

Did this mean there really was some kind of research project at Ashdale? There had to be something more than just a real estate development — unless this guy had slipped his cogs listening to computers dial phone numbers. Tom had almost shouted his last words — now it was real quiet in the office, Irving could feel people listening in the other cubicles. Their pencils down, their keyboards untouched, they could feel the waves of embarrassment and heat from his red cheeks. Tom, too, seemed to sense that he'd disturbed the order of this place — perhaps lessened his chances.

Tom said, "Look, I'm sorry. I'm trying to cultivate humility, but I think I've been through enough tests. Please say something to them. If I don't get in soon, I probably can't continue. I'll probably wind up in some fanatical Christian sect. I'm begging you. Look if there's anything I can do. If you need some wiring at your house." He pulled a stained business card from his pocket. He muttered, "Bye" and slunk away. Irving called security and told them never let Thomas Krutz in again.

Irving had to go into the office Saturday afternoon. He needed to clear up some matters related to the Bradford contract. He loved the office when it was empty. No one bugged you, no stupid questions, no pointless meetings. He was checking over Gilda's work when the phone rang.

"Hello, Wisconsin Data Systems."

"Hello, Mr Pennick, sorry we haven't spoken to you in a while." This time it was a woman's voice full of velvet sex. "We know that you've been making inquiries about us and that makes us proud. We want your inquisitiveness. We're pretty inquisitive ourselves. We know your work number — we even knew you'd be there today. You'll make us a stronger community and you'll get a stronger base for the whole of your being. You came highly recommended by one of our members. Don't you think it's time to stop playing games and drive out and see us? When you finish up today, turn your car north and come see us. We'll put a candle in the window."

He put the coffee-coloured phone back in its cradle. He'd never really been part of a community. He had enough humanities at Berkeley to understand the theory — the good man creates himself by moral interaction with the polis. All of the years of loneliness — even his marriage to Laura had been empty because he hadn't opened up. Now this city by the sea was calling to him. He was wrong to ever mistrust them. He had to bat back tears. He had never known he had had this need nor how deep it had been. He was still in reverie for a moment then gathered up the

unfinished business and closed it in a much-reused manila folder.

He stopped by the john on his way to the car. He straightened his collar, paper-towelled away his sweat and tears — and the tiny bloodstain under his right ear; although he didn't notice it.

He put the top down on his convertible. He hadn't ridden that way for years. The radio played his favourite oldies and the traffic wasn't too thick. Thirty-five miles went by fairly quickly and Irving began looking for his exit. There was a small sign yellow and brown, pointing seaward. A two-lane road with grassy fields on each side meandered toward the Pacific. Then there was a sharp turn to the left — through a big black wrought-iron gate. Ashdale Hills. There weren't any hills. There weren't any houses. Only new trees, clean lawn, and tombstones. It was a cemetery.

Irving stopped his car and got out. He walked among the stones until he found a new grave. Laura Pennick. Of course, a spot was reserved for him by her side. Telephone poles ran through the cemetery — one was next to Laura's grave. He wasn't surprised to note that a line ran down from the pole into the grass of her plot. He looked around many graves had lines. It was such an odd detail he'd overlooked it when he stepped out.

The wind began to hum along the wires.



Illustration by Mick Marble

Don Webb wrote "Rhinestone Manifesto" (*Interzone* 13) and "Djinn" (issue 41). He lives in Texas, and has contributed stories to numerous American magazines.

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AMAZINGLY EXTENDED METAPHORS, NOW VERIFIED BY MODERN SCIENCE!

Simon Ings

I live in Bristol, a city in the South West of England. In its day Bristol was home to shipbuilders, aircraft manufacturers, automobile designers, and a spectacularly doom-laden wartime transatlantic passenger air service. Times change, and today there are only two kinds of Bristolian: the insurance clerk and the hippy.

These tribes exist in a kind of incestuous interdependence: like the black and white figures which make up the yin-yang symbol, each community repudiates the other but each is fatally undermined at its centre by its assumption that the other will continue to exist.

At the heart of the black, there is a dot of white; and vice versa.

The hippies have, by and large, sprung from the loins of the insurance clerks, but things can work the other way about (this is a country, remember, whose Prime Minister's father was a circus acrobat). It is, therefore, of necessity, a very tolerant place.

The two communities work best together when they repudiate the big grey world outside Bristol. In one sense this makes for a very healthy community. Small-scale initiative pays off in this town: experiments flourish which elsewhere would wither for no better reason than for being thought too *outré*.

It's an ideal workplace for practitioners of alternative medicine, and I have a lot of time for such people. I have read too many copies of the *British Medical Journal* to credit the medical establishment with much scientific objectivity. I would favour a rational medicine, but in the absence of such an animal, I regularly spurn the doctors, lackeys as they are of pharmaceutical combines, for the ministrations of a friend of mine here who is, quite simply and in his own words, a healer. His publicity leaflet says:

"According to ancient tradition (and now increasingly verified by modern science) the entire world is composed of patterns of energy and the human body is a network of flowing rivers of energy. Traumatic events or life situations can dam up this flow, thus creating blockages in the individual's relationship to the outside world."

I kept this leaflet because something about it — something other than its daffiness — worried me. I think I know now what it is.

There, in that first line, in the parenthesis, is the crack, the flaw, by which my friend's argument is split open and found to be hollow within. His treatments repudiate the modern Western scientific culture, but at the heart of that repudiation, he fails in courage, and makes a fatal assumption — that the scientific culture must continue to exist without him in order to define his progress. He repudiates the scientific method in favour of "ancient traditions," then he uses scientific rhetoric to exculpate himself.

"Hey, I'm not really against you guys, I just got here first, by a different route."

A generous sentiment. And wrong.

Where on earth has my friend acquired the bizarre notion that Western science uses flowing rivers of energy as a model for the human body?

I am not John Sladek or Tom Disch; I am not well read in pseudoscience and I cannot and do not want to attempt to emulate their crusading stance against its perpetrators. To be frank, I do not give a damn that Von Daniken's brood manipulate scientific models to their own pseudo-scientific ends. I am more concerned with the way in which otherwise responsible scientists hope to enlighten their

woefully ignorant public by feeding them fairy tales in the guise of "thought experiments" instead of actually educating them. I humbly suggest that my friend's delusion is a consequence, not of the machinations of those latter-day P. T. Barnums Von Daniken or Whitley Strieber — but of the writings of many well-meaning popularizers and romanticizers of science.

Fritjof Capra's amazingly extended Eastern metaphors, Garry Zukav's frantically prancing Wu Li masters, Arthur Koestler's drastically cut-and-blow-dried Janus faces, and all the other genuine but hopelessly misguided attempts to deliver complex information simply by missing out the difficult bits have metastasized through the public subconscious to such an extent, mutating as they spread, that today lay people of good will, integrity and impeccable common sense honestly believe that when modern physics entered the Quantum Era, it found the world was no more substantial than a Disney cartoon and as easily called into doubt as a child's memory.

I cite individuals first because they make easy targets; but the fault lies less with individuals than with institutions.

Think for a moment about the space industry. It has built its image upon the rigours of scientific method. NASA's personnel wear white for a reason. White is an ethnographic totem: it spells "boffins," "scientists," ones who know things for sure because the things they know are simple and repeatable. But the space industry long ago spurned the slow road of method revealed in public education and took to the freeway of popular fantasy. When Sir Bernard Lovell in the mid-1960's postulated the idea of travelling to distant points in space by penetrating an artificial singularity, he was not conducting a serious thought experiment so much as sharing a power fantasy with a public awestruck by the spectacle of science suddenly become heroic.

How else, but through the manipulation of power fantasy by the scientific community, could the publics of the West have been expected to swallow the notion of space as a "Final Frontier" ripe for the crossing? Five minutes with a pencil and the back of an envelope should have convinced any half-way intelligent person that Space is thus named because there is an awful lot

of it — more than we can possibly usefully explore at our level of technological attainment. When George Bush now says “it’s time to open up the final frontier” from which planet does he hope to acquire the necessary tech? If he expects NASA to use existing technology to alleviate the toll solar radiation and zero gravity will take on any crew embarking on a mission to Mars, he’s either going to have to turn the entire defence budget over to NASA, or start taking as many lessons from *Capricorn One* as he seems already to have taken from *Star Trek*.

If one attempts to expand the frontiers of science and technology by weaving power fantasies, if one makes out that science is dramatic and heroic and spectacular (and it is not) then one is

sowing the seeds of a cargo culture throughout the body politic: the scientific method is drowned in its own rhetoric, and new products of that culture — artefacts that are of themselves simple and explicable — take on the aura of magical totems. Bill Gibson’s *Neuromancer* sequence postulated such a cargo-culture future. It seems painfully near at hand.

People in a cargo culture grow listless and resentful. If you, a scientifically educated person, attempt to educate them out of their listlessness only by feeding them bright scraps from the scientific and technological table, then they will do no more than use those tidbits for their own ends. They will run horoscopes on your IBM computers. They will regale you with fifty-seven varieties of the Schrodinger’s Cat

parable, all of them wrong, and all constructed to show that science has somehow lost its hold on reality. They will repudiate you, and in that repudiation, there will be the assumption that you will always be there to clothe them and cure them and clean up after them.

I urge the Pournelles and Nivens and O’Neills and Sagans and Gibbins and all the other budding Arthur Clarkes of this world to think before they write. Rhetoric is no replacement for method. Pop science, and the kind of science fiction that seeks to popularize science, is no replacement for the hard graft of public education.

(Simon Ings)

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A Sensitive Dependence On Initial Conditions

Kim Stanley Robinson



The covering law model of historical explanation states that an event is explained if it can be logically deduced from a set of initial conditions, and a set of general historical laws. These sets are the explanans, and the event is the explanandum. The general laws are applied to the initial conditions, and the explanandum is shown to be the inevitable result. An explanation, in this model, has the same structure as a prediction.

On the morning of August 6th, 1945, Colonel Paul Tibbets and his crew flew the *Enola Gay* from Tinian Island to Hiroshima, and dropped an atomic bomb on the city. Approximately a hundred thousand people died. Three days later, another crew dropped a bomb on the outskirts of Nagasaki. Approximately seventy thousand people died. The Japanese surrendered.

President Harry Truman, in consultation with his advisors, decided to drop the bombs. Why did he make these decisions? Because the Japanese had fiercely defended many islands in the South Pacific, and the cost of conquering them had been high. Kamikaze attacks had sunk many American ships, and it was said that the Japanese would stage a gigantic kamikaze defence of the home islands. Estimated American casualties resulting from an invasion of the home islands ranged as high as a million men.

These were the conditions. General laws? Leaders want to end wars as quickly as possible, with a minimum of bloodshed. They also like to frighten potential postwar enemies. With the war in Europe ended, the Soviet Army stood ready to go wherever Stalin ordered it. No one could be sure where Stalin might want to go. An end to the Japanese war that frightened him would not be a bad thing.

But there were more conditions. The Japanese were defenceless in the air and at sea. American planes could bomb the home islands at will, and a total naval blockade of Japan was entirely possible. The Japanese civilian population was already starving; a blockade, combined with bombing of military sites, could very well have forced the Japanese leaders to surrender without an invasion.

But Truman and his advisors decided to drop the bombs. A complete explanation of the decision, omitted here due to considerations of length, would have to include an examination of the biographies of Truman, his advisors, the builders of the bomb, and the leaders of Japan and the Soviet Union; as well as a detailed analysis of the situation in Japan in 1945, and of American intelligence concerning that situation.

President Truman was re-elected in 1948, in an upset victory over Thomas Dewey. Two years later the United States went to war in Korea, to keep that country from being overrun by Communists supported by the Soviet Union and China. It was only one of many major wars in the second half of

the twentieth century; there were over sixty, and although none of them were nuclear, approximately fifty million people were killed.

Heisenberg's uncertainty principle says that we cannot simultaneously determine both the velocity and the position of a particle. This is not a function of human perception, but a basic property of the universe. Thus it will never be possible to achieve a deterministic prediction of the movement of all particles throughout spacetime. Quantum mechanics, which replaced classical mechanics as the best description of these events, can only predict the probabilities among a number of possible outcomes.

The covering law model of historical explanation asserts that there is no logical difference between historical explanation and scientific explanation. But the model's understanding of scientific explanation is based on classical mechanics. In quantum reality, the covering law model breaks down.

The sufficient conditions model of historical explanation is a modification of the covering law model; it states that if one can describe a set of initial conditions that are sufficient (but not necessary) for the event to occur, then the event can be said to be explained. Deduction from general law is not part of this model, which is descriptive rather than prescriptive, and "seeks only to achieve an acceptable degree of coherent narrative."

In July of 1945, Colonel Tibbets was ordered to demonstrate his crew's ability to deliver an atomic weapon, by flying a test mission in the western Pacific. During the take-off Tibbets shut down both propellers on the right wing, to show that if this occurred during an armed take-off, he would still be able to control the plane. The strain of this manoeuvre, however, caused the inboard left engine to fail, and in the emergency return to Tinian the *Enola Gay* crashed, killing everyone aboard.

A replacement crew was chosen from Tibbets' squadron, and was sent to bomb Hiroshima on August 9th, 1945. During the run over Hiroshima the bombardier, Captain Frank January, deliberately delayed the release of the bomb, so that it missed Hiroshima by some ten miles. Another mission later that week encountered cloud cover, and missed Kokura by accident. January was court-martialled and executed for disobeying orders in battle. The Japanese, having seen the explosions and evaluated the explosion sites, surrendered.

January decided to miss the target because: he had a visionary dream in which he saw the results of the bombing; he had not been in combat for over a year; he was convinced the war was over; he had been in London during the Blitz; he disliked his plane's pilot; he hated Paul Tibbets; he was a loner, older than his fellow squadron members; he had read the Hornblower stories in the *Saturday*

Evening Post; he once saw a truck crash into a car, and watched the truck driver in the aftermath; he was burned on the arm by stove oil when a child; he had an imagination.

The inboard left engine on the *Enola Gay* failed because a worker at the Wright manufacturing plant had failed to keep his welding torch flame on a weld for the required twenty seconds. He stopped three seconds too soon. He stopped three seconds too soon because he was tired. He was tired because the previous night he had stayed up late, drinking with friends.

In 1948, President Truman lost to Thomas Dewey in a close election that was slightly influenced by a political group called the January Society. The Korean conflict was settled by negotiation, and in February of 1956 a treaty was signed in Geneva, banning the use and manufacture of nuclear weapons.

Light behaves like either wave or particle, depending on how it is observed. The famous two-slit experiment, in which interference in wave patterns causes light shining through two slits in a partition to hit a screen in a pattern of light and dark bars, is a good example of this. Even when photons are sent at the slits one at a time, the pattern of light and dark bars still appears, implying that the single quantum of light is passing through both slits at the same time, creating an interference pattern with itself.

History is an interference pattern, says the covering law model. The conditions are particles; the laws are waves.

The necessary conditions model states that historical explanation requires merely identifying the kind of historical event being explained, and then locating among its initial conditions some that seem necessary for the event to take place. No general laws of history can help; one can only locate more necessary conditions. As William Dray writes in *Laws and Explanation In History*, an explanandum is explained when we "can trace the course of events by which it came about."

Tibbetts and his crew died in a training flight crash, and the *Lucky Strike* was sent in its place. The bombardier, Captain Frank January, after much frantic thought on the flight there, performed just as Tibbetts' bombardier would have, and dropped the bomb over the T-shaped Aioi Bridge in Hiroshima. Approximately a hundred thousand people died. Three days later Nagasaki was bombed. The Japanese surrendered. Truman was re-elected. The Korean War led to the Cold War, the assassination of Kennedy on November 22nd, 1963, the Vietnam War, the collapse of the Soviet bloc in the fall of 1989. Replacing one crew with another made no larger difference.

Richard Feynman's notion of a "sum over histories" proposes that a particle does not move

from point A to point B by a single path, as in classical mechanics, but rather by every possible path within the wave. Two numbers describe these possible paths, one describing the size of the wave, the other the path's position in the crest-to-trough cycle. When Pauli's exclusion principle, which states that two particles cannot occupy the same position at the same velocity within the mathematical limits of the uncertainty principle, is applied to the sum over histories, it indicates that some possible paths cause interference patterns, and cancel each other out; other paths are phased in a reinforcing way, which makes their occurrence more probable.

Perhaps history has its own sum over histories, so that all possible histories resemble ours. Perhaps every possible bombardier chooses Hiroshima.

The weak covering law model attempts to rescue the notion of general historical laws by relaxing their rigour, to the point where one can no longer deduce the explanandum from the explanans alone; the laws become not laws but tendencies, which help historians by providing "guiding threads" between events and their initial conditions. Thus the uncertainty principle is acknowledged, and the covering law model brought into the twentieth century.

But can any historical model explain the twentieth century? Tibbetts crashed, the *Lucky Strike* flew to Hiroshima, and Captain January chose to spare the city. He was executed, the war ended, Dewey won the 1948 election; the Korean conflict was resolved by negotiation; and nuclear weapons were banned by treaty in February of 1956.

But go on. In November of 1956, conflict broke out in the Middle East between Egypt and Israel, and Britain and France quickly entered the conflict to protect their interests in the Suez Canal. President Dewey, soon to be replaced by President-elect Dwight Eisenhower, asked Britain and France to quit the conflict; his request was ignored. The war spread through the Middle East. In December the Soviet Army invaded West Germany. The United States declared war on the Soviet Union. China launched assaults in Indochina, and the Third World War was under way. Both the United States and the Soviet Union quickly assembled a number of atomic bombs, and in the first week of 1957, Jerusalem, Berlin, Bonn, Paris, London, Warsaw, Leningrad, Prague, Budapest, Beirut, Amman, Cairo, Moscow, Vladivostok, Tokyo, Peking, Los Angeles, Washington DC, and Princeton, New Jersey (hit by a bomb targeted for New York) were destroyed. Loss of life in that week and the year following was estimated at a hundred million people.

At normal energies, the strong nuclear force has a property called confinement, which binds quarks tightly together. At the high energies achieved in

particle accelerators, however, the strong nuclear force becomes much weaker, allowing quarks and gluons to jet away almost like free particles. This property of dispersion at high energies is called "asymptotic freedom."

History is a particle accelerator. Energies are not always normal. We live in a condition of asymptotic freedom, and every history is possible. Each bombardier has to choose.

In *The Open Society and Its Enemies* Karl Popper writes "if two armies are equally well-led and well-armed, and one has an enormous numerical superiority, the other will never win." Popper made this proposition to demonstrate that any historical law with broad explanatory power would become so general as to be trivial. For the school of thought that agrees with him, there can be no covering laws.

In June of 1945, seven of the scientists who had worked on the Manhattan Project submitted a document called the Franck Report to the Scientific Panel of the Interim Committee, which was overseeing the progress of the bomb. The Franck Report called for a demonstration of the bomb before observers from many countries, including Japan. The Scientific Panel decided this was a possible option and passed the Report on to the Committee, which passed it on to the White House. "The Buck Stops Here." Truman read the Report and decided to invite James Franck, Leo Szilard, Niels Bohr and Albert Einstein to the White House to discuss the issue. Final consultations included Oppenheimer, Secretary of War Stimson, and the military head of the Manhattan Project, General Leslie Groves. After a week's intense debate Truman instructed Stimson to contact the Japanese leadership and arrange a demonstration drop, to be made on one of the uninhabited islands in the Izu Shichito archipelago, south of Tokyo Bay. An atomic bomb was exploded on Udon Shima on August 24th, 1945; the mushroom cloud was visible from Tokyo. Films of the explosion were shown to Emperor Hirohito. The Emperor instructed his government to surrender, which it did on August 31st, one day before Truman had declared he was going to begin bombing Japanese cities.

Truman won the election of 1948. In 1950 north Korean troops invaded the south, until a series of six so-called Shima blasts, each closer to the north's advance forces, stopped them at the 38th parallel. In 1952 Adlai Stevenson became president, and appointed Leo Szilard the first presidential science advisor. In 1953 Stalin died, and in 1956 Szilard was sent to Moscow for a consultation with Khrushchev. This meeting led to the founding of the International Peace Brigade, which sent internationally integrated teams of young people to work in underdeveloped countries and in countries still recovering from World War Two. In 1960 John Kennedy was elected president, and he was

succeeded in 1968 by his brother Robert. In 1976, in the wake of scandals in the administration, Richard Nixon was elected. At this point in time the postwar period is usually considered to have ended. The century itself came to a close without any further large wars. Though there had been a number of local conflicts, the existence of nuclear weapons had ended war as practised in the first half of the century. In the second half, only about five million people died in war.

The great man theory considers particles; historical materialism considers waves. The wave/particle duality, confirmed many times by experiment, assures us that neither theory can be the complete truth. Neither theory will serve as the covering law.

The defenders of the covering law model reply to its various critiques by stating that it is irrelevant whether historians actually use the model or not; the fact remains that they should. If they do not, then an event like "the bottle fell off the table" could be explained by either "the cat's tail brushed it," or "the cat looked at it cross-eyed," and there would be no basis for choosing between the two explanations. Historical explanation is not just a matter of the practice of historians, but of the nature of reality. And in reality, physical events are constrained by general laws—or if they are not laws, they are at least extraordinarily detailed descriptions of the links between an event and those that follow it, allowing predictions that, if not deterministically exact, are still accurate enough to give us enormous power over physical reality. That, for anyone but followers of David Hume, serves as law enough. And humans, as part of the stuff of the universe, are subject to the same physical laws that control all the rest of it. So it makes sense to seek a science of history, and to try to formulate some general historical laws.

What would these general laws look like? Some examples:

- If two armies are equally well-led and well-armed, and one has an enormous numerical superiority, the other will never win.
- A privileged group will never relinquish privilege voluntarily.
- Empires rise, flourish, fall and are replaced, in a cyclical pattern.
- A nation's fortunes depend on its success in war.
- A society's culture is determined by its economic system.
- Belief systems exist to disguise inequality.
- Lastly, unparalleled in both elegance and power, subsuming many of the examples listed above: power corrupts.

So there do seem to be some quite powerful laws of historical explanation. But consider another:

- For want of a nail, the battle was lost.

For instance: on July 29th, 1945, a nomad in Kirghiz walked out of his yurt and stepped on a butterfly. For lack of the butterfly flapping its wings, the wind in the area blew slightly less. A low pressure front therefore moved over east China more slowly than it would have. And so on August 6th, when the *Enola Gay* flew over Hiroshima, it was covered by ninety percent cloud cover, instead of fifty percent. Colonel Tibbetts flew to the secondary target, Nagasaki; it was also covered. The *Enola Gay* had little fuel left, but its crew was able to fly over Kokura on the way back to Tinian, and taking advantage of a break in the clouds, they dropped the bomb there. Ninety thousand people died in Kokura. The *Enola Gay* landed at Tinian with so little fuel left in its tanks that what remained "wouldn't have filled a cigarette lighter." On August 9th a second mission tried Hiroshima again, but the clouds were still there, and the mission eventually dropped the bomb on the less heavily clouded secondary target, Nagasaki, missing the city centre and killing only twenty thousand people. The Japanese surrendered a week later.

On August 11th, 1945, a child named Ai Matsui was born in Hiroshima. In 1960 she began to speak in local meetings on many topics, including Hiroshima's special position in the world. Its citizens had escaped annihilation, she said, as if protected by some covering angel (or law); they had a responsibility to the dead of Kokura and Nagasaki, to represent them in the world of the living, to change the world for the good. The Hiroshima Peace Party quickly grew to become the dominant political movement in Hiroshima, and then, in revulsion at the violence of the 1960s in Vietnam and elsewhere, all over Japan. In the 1970s the party became a worldwide movement, gaining the enthusiastic support of ex-President Kennedy, and President Babbit. Young people from every country joined it as if experiencing a religious conversion. In 1983 Japan began its Asian Assistance League. One of its health care programmes saved the life of a young woman in India, sick with malaria. The next year she had a child, a woman destined to become India's greatest leader. In 1987, the nation of Palestine raised its flag over the West Bank and parts of Jordan and Lebanon; a generation of camp children moved into homes. A child was born in Galilee. In 1990 Japan started its African Assistance League. The Hiroshima Peace Party had a billion members.

And so on; so that by July 29th, 2045, no human on Earth was the same as those who would have lived if the nomad in Kirghiz had not stepped on the butterfly a century before.

This phenomenon is known as the butterfly effect, and it is a serious problem for all other models of historical explanation; meaning trouble for you and for me. The scientific term for it is "sensitive dependence on initial conditions." It is

an aspect of chaos theory first studied by the meteorologist Edward Lorenz, who, while running computer simulations of weather patterns, discovered that the slightest change in the initial conditions of the simulation would quickly lead to completely different weather.

So the strong covering law model said that historical explanation should equal the rigour of scientific explanation. Then its defenders, bringing the model into the quantum world, conceded that predictions can never be anything but probabilistic at best. The explanandum was no longer deducible from the explanans; one could only suggest probabilities.

Now chaos theory has added new problems. And yet consider: Captain Frank January chose to miss Hiroshima. Ten years later, nuclear weapons were universally banned. Eleven years later, local conflicts in the Middle East erupted into general war, and nuclear weapons were quickly reassembled and used. For it is not easy to forget knowledge, once it is learned; symmetry T, which says that physical laws are the same no matter which way the time arrow is pointed, does not actually exist in nature. There is no going back.

And so by 1970, in this particular world, the bombed cities were rebuilt. The Western industrial nations were rich, the southern developing nations were poor. Multinational corporations ruled the world's economy. The Soviet bloc was falling apart. Gigantic sums of money were spent on armaments. By the year 2000, there was very little to distinguish this world from the one in which January had dropped the bomb, in which Tibbetts had bombed Hiroshima, in which Tibbetts had made a demonstration, in which Tibbetts bombed Kokura.

Perhaps a sum over histories had bunched the probabilities. Is this likely? We don't know. We are particles, moving in a wave. The wave breaks. No mathematics can predict which bubbles will appear where. But there is a sum over histories. Chaotic systems fall into patterns, following the pull of strange attractors. Linear chaotic figures look completely non-repetitive, but slice them into Poincaré sections and they reveal the simplest kinds of patterns. There is a tide, and we float in it; perhaps it is the flux of the cosmos itself; swim this way or that, the tide still carries us to the same destination. Perhaps.

So the covering law model is amended yet again. Explanations still require laws, but there are not laws for every event. The task of historical explanation becomes the act of making distinctions, between those parts of an event that can be explained by laws, and those that cannot. The component events that combine to create an explanandum are analysed each in turn, and the historian then concentrates on the explicable components.

Paul Tibbetts flies toward Hiroshima. The nomad steps out of his yurt.

Lyapunov exponents are numbers that measure the conflicting effects of stretching, contracting, and folding in the phase space of an attractor. They set the topological parameters of unpredictability. An exponent greater than zero means stretching, so that each alternative history moves farther and farther apart as time passes. An exponent smaller than zero means contraction, so that alternatives tend to come back together. When the exponent equals zero, a periodic orbit results.

What is history's Lyapunov exponent? This is the law that no one can know.

Frank January flies toward Hiroshima. The nomad stops in his yurt.

It is said that the historian's task requires an imaginative reconstruction of the thinking of people who acted in the past, and of the circumstances in which they acted. "An explanation is said to be successful when the historian gets the sense of reliving the past which he is trying to explain."

You are flying toward Hiroshima. You are the bombardier. You have been given the assignment two days before. You know what the bomb will do. You do not know what you will do. You have to decide.

There are a hundred billion neurons in the brain. Some of the neurons have as many as eighty thousand synaptic endings. During thought, neurotransmitter chemicals flow across the synaptic clefts between one neuron's synaptic knobs and another's dendritic spines, reversing a slight electric charge, which passes on a signal. The passage of a signal often leaves changes in the synapses and dendrites along the way, forever altering the structure of the brain. This plasticity makes memory and learning possible. Brains are always growing; intensely in the first five years, then steadily thereafter.

At the moment of choice, then, signals fly through a neural network that has been shaped over a lifetime into a particular and unique structure. Some signals are conscious, others are not. According to Roger Penrose, during the process of decision quantum effects in the brain take over, allowing a great number of parallel and simultaneous computations to take place; the number could be extraordinarily large, 10^{15} or more. Only at the intrusion of the "observation," that is to say a decision, do the parallel computations resolve back into a single conscious thought.

And in the act of deciding, the mind attempts the work of the historian: breaking the potential events down into their component parts, enumerating conditions, seeking covering laws that will allow a prediction of what will follow from the variety of possible choices. Alternative futures branch like dendrites away from the present moment, shifting

chaotically, pulled this way and that by attractors dimly perceived. Probable outcomes emerge from those less likely.

And then, in the myriad clefts of the quantum mind, a mystery: the choice is made. We have to choose, that is life in time. Some powerful selection process, perhaps aesthetic, perhaps moral, perhaps practical (survival of the thinker), shoves to consciousness those plans that seem safest, or most right, or most beautiful, we do not know; and the choice is made. And at the moment of this observation the great majority of alternatives disappear without trace, leaving us in our asymptotic freedom to act, uncertainly, in time's asymmetrical flow. There are few covering laws. Initial conditions are never fully known. The butterfly may be on the wing, it may be crushed underfoot. You are flying toward Hiroshima.

Kim Stanley Robinson wrote "Before I Wake" (*Interzone* 27), which was recently shortlisted for the Nebula Award after its reappearance in *Isaac Asimov's SF Magazine*. His highly praised novels include the loose trilogy which consists of *The Wild Shore* (1984), *The Gold Coast* (1988) and *Pacific Edge* (1990). He lives in Chevy Chase, Maryland, USA.

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The Long Journey of Frozen Heart

Chris Beckett

Well, I have travelled the seven seas and the five continents and the three planets, and I have travelled all the forty-nine separate worlds of the Net. Many many souls have come to see me with their sorrows. But I have never met sorrow like the sorrow of Frozen Heart.

Poor Frozen Heart, whose name was once Mary Louisa Ann. When she found the money to leave her tired sick flesh behind her, she thought she would be free. She came to live inside the Net. She rode bareback on unicorns and flew between dragon's wings. She made love with gods and princes. She swam like a fish under lilies in crystal waters and never had to breathe.

There were so many worlds to choose from. In the eighth world she danced on the lip of a volcano, in the ninth she played on white beaches beneath the Mountains of Eternity, in the twenty-fourth she stalked the neon streets of a city so vast that no-one has ever found its edge. Everything she saw was brilliant and intricate and beautiful. Everyone she knew was sublime. She herself was loved and admired. (For she was a great artist in the supreme artistic medium that is the Net.) But the coldness grew inside her. It grew and grew until one day, unable to deny it any more, she found her way to me.

"What are you looking for?" I asked her, as I always ask.

She said simply: "The cure for my frozen heart."

I said: "What price are you prepared to pay?"

She said: "Any price at all."

So I told her the cure and I told her the price.

Now, many come to me for advice and pay good money for my words; very few listen to what I actually say. But Frozen Heart listened and she sighed and she said: "Well, that is what I must do."

"You are a brave soul," I said, "and I will help you all I can."

So we spent some time talking, there in a little orange grove beside a pool of carp, about the trials that lay ahead. And then I embraced her

and wished her well, and she set off in the direction of Middleworld.

Usually when she went to Middleworld she flew or, if she was in a hurry, she leapt directly there through a Gate. But there was a heavy burden on her shoulders now and it felt too heavy for flying or leaping. So she walked.

And the country she walked through became a cruel waste of jagged stones, and then a wilderness of thorns.

And when she reached the edge of the wilderness of thorns, bruised and scratched and weary, she came across some friends of hers, who were tier-hopping through the worlds of the Net. They were beautiful as peacocks, with brilliant eyes and swirling garments that never came to rest.

"Hey, Frozen Heart!" they called out to her. "We missed you! What have you been doing?"

She told them of her decision and of the long sad journey that lay ahead of her.

"Oh, poor Frozen Heart," said Lilac Eyes, "that is the most beautiful thing I ever heard!"

"Lovely Frozen Heart," said Heaven's Throat, "you are so deep and dark. If only we could all dream dreams like yours!"

And some of them there and then promised to make the same journey, because they were always hungry for new experiences and new emotions — and all of them suffered from coldness in the heart. But even as they promised to copy the steadfastness of Frozen Heart, they grew bored and, without meaning to be rude, they started to flicker restlessly in and out of the world: "Hey, Frozen Heart, we're going now, why don't you come along too?"

But Frozen Heart shook her head and let them fade away into their ever-changing kaleidoscope of brightly coloured worlds. She carried on alone, though the going had become ten times harder because of meeting her friends and saying goodbye.

She came to a place of ice and snow. Freezing blizzards beat against her face and howled around her and stacked up deep drifts at her feet that threatened to engulf her altogether.

And then suddenly, looming out of the whiteness, her Fear appeared to her in the form of a living corpse, a skeleton hanging with shreds of stinking flesh.

"Turn back, turn back!" screamed her Fear through the howling wind.

Frozen Heart shrank back in horror. "What shall I do? What shall I do?" she whispered.

"You knew the price before you started," I said (for I was there with her in spirit), and she nodded and forced herself to walk on past the hideous rotting thing, even though it hissed at her and grabbed out with its putrescent claws. Whiter than the snow in her terror, Frozen Heart fought her way onwards until at last she had left the screaming deathhead behind her and its voice had merged and faded into the voice of the blizzard itself.

She crossed glaciers and crevasses. Once when she was climbing a sheet of ice, she saw the face of another woman, white and distorted, gaping out at her sightlessly from within it. Later she passed a ship that had been trapped in a desolate fjord by the freezing of the sea. Huge icicles hung from its yard-arms and from the bowsprit. And on the deck stood a crew of dead sailors, motionless, leaning on the railings and gazing towards her with empty sockets whose eyes had been picked out by gulls.

And then the Net itself appeared to her in the form of a beautiful young man, carrying in a basket the Apples of Eternal Youth.

"Why are you turning your back on me?" he asked, "when I give you infinite freedom and willingly make your every wish come true?"

Even amidst the snow and ice, the young man stood in summer. His golden-brown torso glowed in warm sunlight and little flowers blossomed beneath his bare feet.

"What shall I do?" Frozen Heart whispered to me again.

"The choice is the same as it always was," I answered.

"Choice is what I offer you!" said the young man (who of course could hear me perfectly, since he was the Net and the Net was the medium through which I spoke). "People say that there are forty-nine worlds in the Net, but those are only the ones that everyone can agree on. Really you can have any world you like. This Arctic waste you are crossing is itself a world you have made out of your own mind and your own perversity. You know quite well that if you chose you would see the sunny hills of world eleven. They are all around you now, the trees, the birds, the green grass. Wherever you are going the Net can give you something just the same or better. Even sorrow, if that is really what you want, even pain, even ice and snow! Why leave? Why should you think of leaving? Look at the riches that I offer!"

And the young man banished the waste of ice



and snow and made it into a sparkling wonderland of precious stones: diamonds, sapphires, rubies...

But Frozen Heart didn't answer, just shook her head and turned away from him and went on. And now her journey seemed so heavy that even walking seemed too hard and she was crawling on her hands and knees across those cruel hard jewels, and there was nothing else but white hot sand and a huge angry sun raging above her head. But what was even crueller still was that sometimes there was something else; sometimes the stones blossomed, in spite of all her efforts. They blossomed and branched and became the sweet, subtle, ever-changing thing that she knew the Networlds could be.

But she shut these glimpses away from herself and made the burning wasteland return. She made that harsh, loveless sun beat down on her harder still. She made her lips crack with thirst and her knees bleed from crawling...

And at length she came to Middleworld.

There are no thorns or jewels in Middleworld. There are no landscapes of snow. There are only *options*, long cool lists of possibilities, each one with its neat price tag beside it.

"And what can I do for you?" Middleworld said, assuming the likeness of an old-fashioned shopkeeper (standing behind a counter in a striped apron in front of shelves packed from floor to

ceiling with wonderful things.)

"We've had some super new self-image packages just come in," said Middleworld, rubbing its friendly fat hands together. "The latest thing is talking animals and mythical beasts. Wonderful scope for self-expression. They've been going like hot cakes! How about having a change from being human for a while? I could see you as a lonely albatross, or maybe a little bleeding lamb?"

As Frozen Heart didn't answer straight away, Middleworld carried on with its pleasant patter.

"Or perhaps it's new destinations you want? One can get stuck in a rut, even in the Net! Have you heard about the new development opening up in the thirty-third? They call it the Great Game. It's like a three-dimensional game of chess, but with no beginning and no end, and everyone who enters must join in, as a knight or a queen or a pawn. Very intense very intellectual, very dark... Not your kind of thing? Perhaps you fancy a bit of naturalism? It can be a welcome break. The latest thing in that line is the new mangrove swamp in twenty-nine, absolutely state-of-the-art stuff, authentic down to every detail, even to the little mud-fish and fiddler crabs and mosquitoes whose bites really sting."

Frozen Heart started to speak, but her courage failed her.

Middleworld gave a broad wink. "To hell with mangrove swamps, eh? Is it the old love-life that needs a bit of a boost? Lots of lovely new ideas in that area, of course. For example..."

But Frozen Heart steelled herself and said: "I don't want any of those things. I want to go to Reality."

"Reality?" Middleworld raised one eyebrow in surprise and disapproval. "Actual reality? You will need a vehicle of course for that, but is that really where you want to go?"

"Yes," said Frozen Heart, "I have made up my mind."

The shopkeeper shrugged and promptly dissolved, to be replaced by a visual display. "Well, it's your choice," said Middleworld's disembodied voice. "These are the vehicles we have available. As you can see, they are very expensive things to hire."

She chose one, almost at random, and many thousands of credits were transferred from her account.

The vehicle was in the form of a Caucasian woman of middle years with brown hair and no special distinguishing features. It was a high class machine, whose outside was covered with real living human skin and flesh, grown in tissue cultures. The assistants in the hire shop made Frozen Heart walk round the room two or three times in this new body to make sure it was working properly and was properly under her control.

Then she stepped out into the drizzle and disappointment of Reality.

She had forgotten just how hard it was. In the forty-nine worlds thought and action merged and dreams leapt fully clothed out of people's heads. You could fly, or burrow underground, or be in two places at once. You could build yourself a house as quickly as you could decide what colours to paint the walls. But here matter was solid and final. Every metre of space had to be won from the forces of inertia and gravity and paid for in the relentless ticking by of real time. Dreams were faint and far away.

And it was raining dirty water in a dirty concrete street.

"Go back!" screamed her Fear.

"Come back!" called the faraway Networks and all her peacock-coloured friends.

But brave Frozen Heart turned her face away and started once again to walk, though walking here seemed far harder even than crossing that Arctic wasteland, or the desert of precious stones.

She was in a city. It was one of the greatest of all the great sad cities of Reality. The vehicle hire shop lay on one side of it and her destination lay on the other, so she made her way slowly through the city's streets, gazing up with a sinking heart at its concrete skyscrapers. In size they were tiny compared with the buildings in the twenty-fourth world (which are fragile and crystalline like shards



of broken glass, and which tower ten thousand metres above the clouds...). But then these towers of Reality were not like the instant dream-towers of the Net. These had had to be laboriously assembled girder by heavy girder, each one lifted into place against the downward drag of gravity, by sheer effort of the human will.

And now the skyscrapers were all in decay and the once lively streets were dull and silent, sullenly tramped by the elderly and the religious and the poor. For like all the great cities, this place had lost the brightest and the wealthiest of its people. They had gone long ago into the Net, which sets no limits except the limits of the imagination.

A beggar came up to her, a urine-smelling little man with huge red bloodhound eyes, who held out a grimy hand and murmured: "The price of a coffee, ma'am, the price of a coffee..."

She was about to congratulate the man on the power of his performance, when she remembered that this was *real*, and a bit of money was really all he wanted from her.

"I'm sorry, no cash, only credits..."

The tiny man mouthed a tiny obscenity.

She saw a woman she had once known coming out of a church, twenty years older, and greyer and weighed down with care. She had four children following after her.

"Hello, Theresa!" Frozen Heart said. "You won't recognize me, this is just a vehicle, but I was once your old school friend, Mary Louisa Ann. Do you remember? Once upon a time we were so close..."

The woman glanced at her for a moment, then pushed past, shepherding the children back to the car with only a single anxious, hostile glance over her shoulder.

Later on, in a smaller street Frozen Heart turned a corner and was met by two youths with sharp knives.

"Okay, all the money, and no shit!" said one, who had a wall eye.

"Yeah, and *move it!*" said the other who was some kind of albino with mirror glasses.

Frozen Heart said, "I have no real cash for you. I'm not even a real person you can kill. This is only a vehicle..."

"Jesus Christ!" said the albino.

"*Shi-it!*" said the one-eyed.

They didn't know much, didn't even know how to read or write, but they knew that what a vehicle sees the Net remembers. They ran off, though as he went past her the albino swiped at her with his blade and grazed her arm.

Frozen Heart wept, standing there alone in the street with blood staining her blouse. Then a kind fat woman took pity on her, led her to a little bar and ordered coffee.

"Why don't you just give up on this old place?" said the kindly woman, offering a hankerchief to wipe away the real tears that flowed from the



vehicle's eyes. "You had to come here to see for yourself dearie, of course you did. But now you've seen it, you want to return. That's quite understandable, love. There's no disgrace in that!"

Frozen Heart studied her companion carefully. "You're not from here are you?" she said. "You're not a real person. You come from the Net like me."

The other woman smiled, "My dear, I am the Net. I've been watching you to make sure you were alright. Now it's time to come and bring you home."

"You're the Net? You took a vehicle yourself, specially to find me?" For a moment Frozen Heart was touched. "Why on Earth did you do that?"

"For two reasons, lovie," said the Net through the pleasant voice of the motherly woman. "For one thing, let's be honest, we do not want to lose your valuable custom. But I like to think too that I *care* about my people. After all we have a very close relationship: you create me and I recreate you."

The coffee came and the kind woman poured some out for Frozen Heart.

"You particularly I care about, dear, as do your many friends. You enrich life for us, all. Come back to us Frozen Heart, come back. We know you see some things more clearly than the rest of us. But don't abandon us! Come back and teach us what you know!"

Frozen Heart started to tremble violently as her vehicle struggled to obey the contradictory impulses she was sending it. Part of her so *much* wanted to return.

She tried to get a grip on herself. She drew breath and reached out for her cup of coffee. With great effort she steadied it, lifted it to her lips and sipped. And then suddenly the effort was too much and the cup was flying from her grasp, bouncing on the corner of the table and smashing to pieces on the tiled floor.

Somehow this made up her mind.

"Goodbye," she said abruptly. Then she leapt up, rushed out into the street and hailed a yellow air-cab, before the nice motherly woman had time to come out after her and persuade her to come back.

"Well done, Frozen Heart, well done," I whispered as she climbed into the back seat of the cab and promptly dissolved into tears.

"Hey lady," said the driver, glancing in his mirror, "be my guest if you want to cry, but tell me first where you want me to go!"

"To the Storehouse," she managed to say between sobs, "to the Netco Storehouse..."

No more time-wasting, she told herself. And the cabdriver took her to the Storehouse, a grey monolithic-looking building on the outskirts of the city, ten storeys tall and made almost entirely without windows, as if it was a prison or a fort.

At the reception desk she identified herself with her personal code and said she had come to view her property.

"Sorry," said the woman behind the desk, "viewings are on Tuesdays only and you need an appointment. It's for security reasons. For your own protection really..."

"I have travelled a long, long way," said Frozen Heart. "Could you not make an exception just this once? If I were to make an additional payment, including something for yourself, just for your trouble..."

And she started pouring credits out from her account.

"Well, it is most irregular," said the receptionist, but she picked up a phone and said, "I'll see what I can do."

A storeman came down. He had a twisted spine and a twisted, embittered face. But when a substantial tip had been paid to him also, he agreed to take Frozen Heart up to the Galleries.

They walked down a long corridor and at length emerged into an enormous hall, whose sides were lined with ten tiers of galleries, each in turn with three tiers of numbered drawers. Clicking his tongue and consulting the slip which the receptionist had given him, the hunchbacked storeman led Frozen Heart up to the fourth gallery and unlocked the twenty-third drawer in the middle row.

There was a clear plastic bag inside it. And inside that was Frozen Heart's property: a brain, a liver, some arteries and a slowly beating heart...

There were tubes of fluid going in and out of the bag and wires poked into the brain, linking it up to the small transmitter that fed into the Net.

Frozen Heart stared down at the reddish mass pulsing in the plastic bag.

And after a long silence she spoke.

"Is that really *me*?" she asked.

The storeman nodded grimly and showed her the label that was stapled onto the top of the bag. Underneath a bar code, the name was printed in tiny letters:

**Mary Louisa Ann Kennedy
0808 9764 4386 7790**

Frozen Heart shook her head in disbelief and reached out to touch the brain.

"Is it really in there that these thoughts of mine are going on? Is it really that thing that chooses these words I speak?"

"It is. Through this transmitter and through the Net, it tells your vehicle what to do."

"Is it really that beating heart which keeps it all alive?"

"Yes, my dear, it surely is," said the storeman. He was moved in spite of himself by her emotion and he tried to speak comfortingly. "But if anything were to go wrong with it, we'd have it replaced by an electric pump in no time. On that you can rest assured."

She looked round at all the galleries and all the hundreds of thousands of drawers that held the brains and hearts of the countless citizens of the Network.

"I want to have my self back," said Frozen Heart, "I want you to give it all to me."

The storeman stared at her, horrified. "I can't do that! It's *strictly* against the rules! And anyway, it would be allowing you to die. I know there's a life-support pack in the bag, but it's only for emergencies. It won't last longer than a day."

"Pay him!" I whispered to her. "Pay him all you can!"

Like many of the people who still have to live in Reality, the storeman had behind his ear a little transmitter that fed scraps of information and tunes and things into his inner ear and eye, and linked him up to a sort of impoverished and limited version of the Net. And now he stared in amazement as his inner eye showed him credits pouring like a Niagara out of Frozen Heart's account into his own, so fast that the tens and units were nothing but a blur. It was more money than had passed through his hands in his whole life. For Frozen Heart had become quite wealthy in the Net, and she was giving him almost all she had left.

"Allright, allright," the storeman muttered, with trembling hands, he pulled the bag of organs out of the drawer and helped her to conceal it under her coat.

"Now quickly," he whispered anxiously, "hurry up and go."

And looking nervously around, he led her quickly back out of the hall.

She took a taxi and then, when her last few credits had finally drained away, she got out into the road and walked. She walked and walked until the shoes were worn from her feet. She walked until the blisters came and after the blisters burst, always holding tight to the precious pulsing bundle underneath her coat.

Poor Frozen Heart, she was so tired and so weary and so cold, but she just kept walking, ignoring the agony of her bleeding feet, and the sad scenes of Reality passing her slowly by. And at last as night was falling (stars glimmering faintly here and there between dirty orange clouds) she came to a small stony hill, an isolated hummock, that had been forgotten both by the city and the farming conglomerates. Nobody lived there, it was just stones and thorns and tussocky grass and everything was quiet. And on the bare hillside she at last stopped and gently laid down the bundle that she'd carried so far.

And she began to dig. She had no spade or trowel or tool of any kind, so she had to claw at the rough stony ground with her bare hands, the hands of the vehicle, tearing and tearing at the ground. It was tough and unyielding and very soon her nails were all torn and the fingers bloody.

Now a vehicle may be simply a remote-controlled machine but it is clothed in real skin and human flesh and its nerves transmit real pain. But steadfast Frozen Heart dug on anyway until the human flesh came away in shreds and strands and the fingers of metal and plastic appeared beneath, with their bolted joints and their wires...

And when she had dug a deep hole, she took her precious plastic bag in her metal hands and slowly tore it open. Salty nutrient fluid spilled out. Then, as gently as she could, so as not to tear or damage anything inside, or to disrupt the delicate nets of nerves and blood vessels, Frozen Heart took out the organs one by one and laid them down gently in the hole. First the brain, then the liver, then the spongy little kidneys... and at last she took out that warm and softly beating heart. Briefly she caressed it (as best she could with her poor metal hands) and then she laid it down too in the cold stony soil, and began to cover it up...

But she had hardly thrown a dozen handfuls of soil into the grave before she felt awareness begin to fade. The robot body of the vehicle fell away from her. It ceased to be under her control. It crumpled up far away like a discarded doll and had nothing to do with her any more.

But just before that happened, it dropped onto the barely covered grave the Netco label from the bag:



Mary Louisa Ann Kennedy
0808 9764 4386 7790

She saw a tree soaring up somewhere dimly in the darkness, its great cool branches reaching up into the sky and drinking the stars and rain, growing darker, and quieter, and darker...

"Was that what you wanted, dear Frozen Heart?" I whispered from far away.

"Yes," said sleepy Frozen Heart under the earth. "Yes, oh yes, it was..."

"Sleep deeply, Mary Louisa Ann. You are Frozen Heart no more."

Chris Beckett wrote "A Matter of Survival" (*Interzone* 40) and "La Macchina" (issue 46) — and, in our view, his stories have been improving by leaps and bounds. He lives in Cambridge.

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subscription to *Interzone*
as a gift to a relative or
friend? Form on page 46.**

Chaos Seen John Clute

"She walks in beauty like the night," as Peter de Vries once wrote, "Watchman." We are referring of course to Kate Wilhelm, the implied-author Kate Wilhelm most of us know, signalling just a little frantically at us through her many pages.

Warmly, she sweeps us in, bribing us to stay with a doped cookie. Winningly, she introduces us to her cast, a scurry of mid-American folk. Offhandedly, she points out the region. As we get to know the cast and their home, we learn to recognize their quiddity and resource, to taste something of the subtle intensity of her grasp of humans; and her grasp of place; and all without contrivances. At the same time, however, we cannot fail to register something ominous throbbing like a toe-stub of tom-toms in the deep waters of the circumambient world of the book, and as we near the end of the text this subliminal disorder of bumping resolves itself into something indeed dreadful: it is the sound of a plot that has begun to turn generic. Suddenly the benthos of the telling—the primal Kate Wilhelm metaphor of the world within the senses always being aquatic—dries up, the *mise en scene* shrinks into toppling flats, and the cast, waving vain feelers like stomped ants, hobbles out of sight, out of mind; like a swan which has run out of pond, the novel lurches—leaking at all seams the last of its gift of world-water—to a pugnacious but clearly bewildered halt, feathers ruffled, bathos embraced.

Until, perhaps, now. The five long stories assembled in *Children of the Wind* (1989 in the USA; UK release from Robert Hale, £13.95) may continue variously to demonstrate Wilhelm's long inability to begin and end tales in the same register; but in *Death Qualified: A Mystery of Chaos* (St. Martin's Press, \$22.95), her finest novel and by far her longest to date, she has finally managed to construct almost the

entirety of a tale out of the terms that govern its inception.

The stories first. There may be some point in going through them chronologically. "A Brother to Dragons, a Companion of Owls" (1974) is by some odds the worst told of the lot, with a scatty woodenness of narrative diction that seems to bode ill. In a post-holocaust city, sterile oldsters repeat Dying-Earth-like ceremonies in vain attempts to maintain their personalities, and the shards of their culture, against the ageing which is now about to address them terminally. The Protagonist—a young medical student when the catastrophe struck—must deal with an incursion of feral children, who turn out to be as sterile as their elders. The plot shifts and shags, and seems to be looking for endgame to approach and, by approaching, shape; and then, astonishingly, finds it. The close of the tale—the final sentence being a genuine stunner—is a true slingshot, one of the few Wilhelm has ever brought off.

But the remaining stories in the collection—her fifth—descend variously into the wallows. "The Blue Ladies" (1983) stamps a fantasy ending onto an otherwise unexceptionable—though sentimentally heightened—tale about the nature of art, which is properly seen as both invasive and redeeming. "The Gorgon Field" (1985) caps a firmly conceived, compactly described and bodingly ambivalent family-romance melodrama set in a Colorado mountain valley with an appalling cod mysticism routine. "The Girl Who Fell Into the Sky" (1986) similarly sets down a "mundane" drama of some complexity, then segues into a fantasy haunting/re-enactment shtick, squandering several precious pages on a down-to-the-last-detail explanation of the event: at which point, all the air having leaked out of the tale, there is nothing to do but stop, dead. And the title story, not before published, fails likewise to

bring itself off through genre-switching, so that the mutations of understanding that obtain between a man and wife and their possibly paranormal twins, intricately limned by Wilhelm, ends in thick-eared gobstop-guignol. She ends stories in the way a bad housekeeper ends dust, by sweeping them under the carpet.

But *Death Qualified*, though a sudden wall-eyed twenty page under-the-carpet-with-you jig does strain one's patience at the very end, works superbly for 400 pages to build like coral its slow working-out of a long, elaborate, thought-through plot. And it may be that Wilhelm, in focusing her attention upon fractal imageries and the chaos theories that—to this innumerate mind—magically construct entire worlds thereon, has found a philosophical linkage between her sense of the world—her aquatic sense of the constant becoming of the well of being—and her sense of how to plot that world, which, we have suggested, has lacked pliancy or, indeed, wit.

As *Death Qualified*, for hundreds of pages, works as a courtroom drama, and strictly adheres to the protocols of that format, it might plausibly be suggested that the book needed no underpinning, just *obedience* to the demands of genre. Courtroom dramas, after all, depend on the assumption that something which may be designated "truth" can be known, and that a controlled procedure of revelation can uncover that "truth." They require—and novels written within their remit feast upon—a strict and methodical rhetoric of what one might call the phenomenology of truth-extraction; and *Death Qualified* violates only one of the written or unwritten rules of the format. The trial which comprises the centre-piece of the book ends in a hung jury. The revelations duly delivered within the course of the trial do not—as normally would be the case—cleanse the book containing them of the falseness and melodrama of prosecution. So *Death Qualified* must resolve itself somewhere beyond—and does so by plunging into the waters of chaos.

The story is necessarily of some complexity. Briefly: Lucas Kendrick has been involved in experiments in perception based on the theory that our adult seeing of the world represents a highly restrictive coding

of what the world itself gives to the naked eye. The problem is to recreate that naked eye, the eye of the infant who trains himself to forget most of the infinite beingness of things before he can even talk. Fractal theory comes into play—a sense that the weaving of morphemes of the World into thunderstorms and the Gnomes, which constitute the world, might be visible to that naked eye. But insanity seems to result, because the brain-codes adults see by are in fact the shape of adult brains, and Kendricks burns out. At the same time, one of his senior colleagues has overdone on god-viewing, commits mayhem which Kendricks is privy to; and Kendricks must be kept in a state of catatonia. After eight years, he escapes, and the novel begins.

The tale moves to semi-rural Oregon, where we concentrate on two women: his wife Nell, who fears his return, and who is the most likely suspect when he is found dead on their property; and Barbara Holloway, who is brought in by her father, Nell's neighbour, to defend her. The absorbingness of that defence, which takes up much of the book, is nearly total. It is most excellently done. And even the hung jury at the end feels right. The ending combines a traditional solution—logically and methodically worked into the text over hundreds of pages—to the murder; and an answer to the sf question of the nature of naked seeing of the world. Is it mere chaos? Or is it like chaos theory: chaos theory demonstrating that the generative rules governing certain phenomena seem like chaos because those rules do not grant foresight, and that because normal humans see through a wrestling match of memory and input, chaos seen must rip the head open. Does naked sight lead solely to insanity, or can a rewriting of the codes of vision—accomplished in the novel by a rather mystagogic set of floppies full of object lessons in how to open the eyes—grant human beings the god-seeing? The end of the novel—after the action shtick almost trips the swan again—seems to say Yes.

In the end, a good ending. It will be one of the finest novels of the year. In the end, fractals and the old Wilhelm benthos have become one. So then rejoice, let Chaos rain.

The Triumph of Hugo

Paul J. McAuley

Like an alternate history told in reverse, modern sf may have sprung from either of two sources. According to almost any Yank, we are the inheritors of the technophilic triumphalist gadgeteering paraliterature of Hugo Gernsback (*Amazing Stories*, Prop.). Not so, argues the doyen of British sf writers. Brian W. Aldiss, for it is he, descends in lamplit darkness from a ruined tower covered in ivy. Knee-deep in heavy mist, he offers a leather tome big as a Bible and pronounces that here is the true ur-text of sf. It is Mary Shelley's gothic romance, *Frankenstein: or The Modern Prometheus*.

It's an argument that has been stirring fitfully ever since Aldiss published *Billion Year Spree*, in which Gernsback was characterized as one of the worst disasters ever to hit the science-fiction field. But no matter what its source, there is no contest over who has most influenced modern sf. In the red corner a muscular, heroic figure jitters with can-do eagerness, bristling with TV antennae and weird gadgets: psionic dowsing sticks, Exxon maps of the universe, hermetic decoders, plastic ray guns. In the blue, a slim young lady in 18th century daydress armed with no more than the pure certainty of her vision. How can she possibly win?

Well, she can't, which is the story of modern sf in a nutshell, and which is kind of the theme of Aldiss's latest novel, *Dracula Unbound* (Grafton, £12.99), in which Gernsbackian can-do vigour collides with the sensibilities of another gothic author—this time, of course, Bram Stoker. Like *Frankenstein Unbound*, it sends Joe Bodenland, inventor, millionaire and primal force, back in time to gather up an author whose inventions are not inventions at all, but portents, and save the human race from extinction at the hands of a monstrous species. But this Joe Bodenland is not precisely the Joe Bodenland of the earlier book. For while *Dracula Unbound* is set twenty years earlier, Bodenland's son Dick and daughter-in-law Molly have been killed in an accident without producing the

grandchildren mentioned in *Frankenstein Unbound*—yet Bodenland has, apparently, shaken the hand of Frankenstein. Perhaps this is a parallel universe, or perhaps it's a symptom of the rush of composition which infuses *Dracula Unbound* with motion as well as the occasional glitch. For after the fine opening passage depicting the final days of a dying Earth under vampire rule, there are none of the long contemplative passages which mark the Gothic mode and gave *Frankenstein Unbound* its dreamy strength. We are on Gothic territory, but we move through a great deal of plot at Gernsbackian pace.

For this Joe Bodenland is not the refugee from the 21st century clobbered by scientific nemesis of *Frankenstein Unbound*. He is a thoroughly Gernsbackian hero: an inventor who has just produced a kind of time machine in his private laboratory: a restless pragmatic American with a soap-opera family who just don't understand him—skydiving wife Mina, half-alcoholic son Larry whose grocery empire doesn't live up to Bodenland's expectations, just married to lovely heiress Kylie (I kid you not, although it is around about here that we begin to suspect Aldiss may well be).

We zip through a demonstration of Bodenland's stasis machine, his son's wedding, and discovery by his geologist friend of two coffins entombed in Mesozoic rocks, just beneath the discontinuity which marks the catastrophic extinction of the dinosaurs. A ghost train is seen and Bodenland investigates, using his stasis machine to board it. The train is a time machine run by vampires, led by Dracula himself, bent on completion of the future defeat of the human race, at the end of the 26th century.

Bodenland masters the train long enough to disembark in the 19th century to enlist the help of Bram Stoker—which allows Aldiss to tip in his theory that the author of *Dracula* was afflicted with and obsessed by syphilis, along with a fine, affectionate portrait of Stoker and of *fin de siècle* Victorian England. Bodenland and Stoker hit it off, clapping each other on the back with enthusiasm and a cross-fire of *bon mots*, and zip off to wrest the super-fusion bomb from the future before the vampires get hold of it ("And this should be 2599, about teatime"), zip back to save Mina

from vampiric infection, and hurtle, *en famille* in true soap-opera style, back to the Mesozoic, where the vampires had their heyday as parasites of dinosaurs.

It's a cheerful shambling rush of a book, in which it forever seems that scientific triumphalism will be contrasted with something else, but never is. Instead, it becomes a one-sided match of science (Bodenland) over superstition (Dracula), of head over heart, sustained only by the fine careless precision of Aldiss's insouciant invention, and so carried away with itself that the unravelled loose ends endemic to any story involving time travel scarcely matter. Like science, the kinesis of plot tells all before it. Although we suspect that buried somewhere in the rubble is a much finer book, perhaps we should just relax and enjoy the ride, even if we do have the curious sensation of having Aldiss's tongue planted firmly in our cheek.

Horror has moved a long way from *Dracula*, just as sf has moved on from *Frankenstein/Ralph 124C 41+*. In *Splatterpunk: Extreme Horror* (St Martin's Press, \$14.95), Paul M. Sammon has thrown together 14 reprinted and two original short stories, an article on hard-core gore cinema and a long rambling contradictory editorial article high on hype and rhetoric and low on just about everything else, in an attempt to convince us that here is horror's latest evolutionary thrash. Whatever *Splatterpunk* is (something this anthology does nothing to illumine), it appears to have a strong symbiotic relationship with SFX-dominated gore cinema. Craig Spector and John Skipp, who coined the term, write novels and film scripts turn and turn about. Sammon is a Hollywood hyphenate. Half of the stories seem to be by Hollywood hyphenates devoted to doing nothing but trying to top the gross outs of direct-to-video films. Others shine through on their own merits.

Joe R. Lansdale's "Night They Missed The Horror Show" undercuts the sham pretensions of gore films by showing what happens to a couple of kids who stray too far on the wrong side of the tracks — the real world is less forgiving, far more random. It's the strongest story in the book, because it doesn't play around or aim for cheap laughs, and most of all because it doesn't flinch from its premise. Doug Winter's "Less Than

Zombie" mixmasters the brand-packed emptiness of brat-pack fiction with zombie movie tropes in a Los Angeles in which the living are colder than the reanimated dead who outnumber them. George R. R. Martin's "Meathouse Man" is a fine piece of gothic sf in which technology provides the means for the adolescent wish-fulfilment of endless zipless fucks with no emotional baggage. Clive Barker's "The Midnight Meat Train" and John Skipp's "News at Eleven" both body forth the seepage of unease beneath modern American urban society. Yet if there's any *zeitgeist* to draw this collection together, Sammon's incoherent manifesto resists defining it, and one is left with the conviction that he is not so much promoting *Splatterpunk* as Mr Paul M. Sammon.

Meanwhile, there is always Fantasy, literature of the eternal return and the affirmation of stasis. There is, for instance, Phyllis Eisenstein's *The Crystal Palace* (Grafton, £14.99), a literate retelling of the Sleeping Beauty story, in which the sorcerer Cray Ormoru (who in a previous book has vowed to free demons of Fire, Air and Ice from bondage to his fellow sorcerers) strives to win the hand of sorceress Aliza, his heart's desire and protégé of a sinister sorcerer, who lives in a palace in the heart of the realm of crystal demons.

Ms Eisenstein tells her tale with a limpid clarity and brisk efficiency, yet it seems to exist in a kind of shining limbo all its own. Her hero is at best a prig, and his romantic quest reduces down to a locked-room mystery. How fine it must be, to be a sorcerer, more powerful than any mortal man, the envy of kings! And yet, at tale's end, how complete the closure. Nothing changes, and nothing escapes.

A great deal tries to escape James Blaylock's *The Stone Giant* (Grafton, £3.99), which at times doesn't so much resemble a text as a box crammed full of rumbustious notions trying to run off in a dozen different directions. *The Stone Giant* is not so much a fantasy as a fabulation, a tall tale set in the same magical world as his earlier novels *The Elf Ship* and *The Disappearing Dwarf*.

Theophile Escargot is kicked out of his own home because of his appetite for his wife's pies, and sets out on a

rambling quest to save beautiful Leta from possession by a witch. Like all Blaylock's fiction, a double handful of seemingly disparate strands — the fiction of G. Smithers, leaf-riding henny-penny men, a marble-stealing dwarf, anarchic goblins, elves captaining ships of the air, lilac kelp, a charm which compels the truth — are gradually drawn together to make a kind of momentary sense. It's slyly humorous, strange and fey, and eternally hopeful, a baggy tale that seems to tell itself because Blaylock only *appears* not to be in control of his material.

Also noted:

Literary Outlaw: The Life and Times of Williams S. Burroughs (Bodley Head, £20) is a detailed, clearly written, affectionate yet unflinching portrait by Ted Morgan of a writer whose psychoses, if that's what they are, so effectively mirror those of our own troubled century. Burroughs has had more influence on sf than many of its more staid practitioners like to admit. His first novel, *Junky*, was published as an Ace Double, and Burroughs devoured it and poured its tropes, as so much else, into his own nightmare of sinister control systems underlying modern history. How many of you realize that one of the sources for his *The Wild Boys* was a Paul Anderson novel, *The Twilight World*? Like sf, Burroughs long existed on the edges of literature before gaining respectability through the Beat Movement and Morgan cannily and comically opens with an account of Burroughs's election to the American Academy and Institute of Arts and Letters before plunging into the long exile of Burroughs's life. Burroughs apparently fully cooperated with Morgan's intensive investigations, and this book amply repays his trust.

Dim Sum Wendy Bradley

OK, here's the thing. You have just watched your entire village destroyed by giants who grabbed your chief and asked "Where is the citadel?" When he said you didn't know what they meant but you'd be glad to help them look they ripped him and everyone else limb from

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limb in a couple of pages of senseless violence. They didn't tear you (being the hero) limb from limb but instead captured you and tied you to a tree next to a disposable character you haven't met before. The giants ask the disposable character "Where is the citadel?" and he spits something heroic about not knowing but not telling them even if he did and so they bash him to death with a handy tree. They turn to you. "Where is the citadel?" What do you say?

Everyone I have put this question to has said "Over there!" "That way!" "Three leagues past the misty mountains, turn right at the dragon's cave and you can't miss it!" The concept — lie or die — is not difficult, indeed only a dork would fail to think of it. I have to tell you that *Elven Star* is populated entirely by dorks. *Elven Star* (Volume 2 of "The Death Gate Cycle") by Weis and Hickman (Bantam, £12.99) takes Haplo and his faithful dog (about whom I have severe suspicions) into the next world in the promised quartet, the fire world. I am not at all clear about this fire world. I always have trouble working out the shapes of bizarre universes, but as far as I can make out the entrance to the world is via the Death Gate which is in the middle of four suns. The surface is a Dyson sphere around the four suns. There is no night and so the trees on the planet surface have grown as "big as continents" and the inhabitants live on thick canopies of moss, thick enough for there to be lakes and cities on them, so that they function just like, er, ground. There are also stars, but don't ask me how anyone spots them.

The footnotes are the key to what is wrong with Weis and Hickman's oeuvre. They can think up a universe that shoots along at a lickety split pace and throw in a bunch of characters taken from Universal Stereotype along with the best, but whereas the merest amateur knows that you should try and incorporate your weird and wonderful beasts into the plot so that, say, we might learn that a common mode of transport is gigantic recalcitrant spiders when they drip webbing and get recalcitrant, Weis and Hickman in contrast simply use the spiders to get from A to B and tell us they are giant recalcitrant spiders in a footnote. I liked *Elven Star* quite a lot, and hated liking it much, much more.

That was about typical of this month's batch of books in general — I opened the package and looked at the goodies I had in store with great pleasure, and then found the actual experience of reading them a big disappointment. Anne McCaffrey's latest, *Pegasus in Flight* (Bantam £13.99) is like Chinese food, filling but not satisfying. It is set in the *To Ride Pegasus* world of emerging telepathic/telekinetic Talents, between that timescale and that of the Rowan stories. Here Tirla, a streetwise illegal girl with a Talent for languages, and Peter Reidinger, a crippled boy who develops awesome kinetic ability as a compensatory Talent using electricity in symbiosis (the mechanism of the Rowan/Raven stories) are both discovered by Rhyssa Owen, the granddaughter and successor to Daffyd ap Owen, and are saved by her and their own Talents from a child slavery/porno ring. There is also a plotline about the Padrugoi space station and the Russian queen bitch Barchenka who is its construction manager. On the whole it is horribly racist and sexist — Russians are pigheaded and butch, "Neesters" — people of middle and near eastern origin — are devious, overfertilized and untrustworthy, and we — white Americans — are paragons of virtue. Fast and exciting, though, and you'll want to read another one half an hour later.

Melanie Rawn's *Sunrunner's Fire* (Pan £14.99 and £8.99) is the third in what looks to be a continuing series rather than a trilogy. I had a great deal of trouble getting into this, not having read either of the first two and so struggling with the bewilderingly large cast of characters. The world is one of feudal principedoms ruled by one high prince and complicated by a hereditary telepathic talent which is part of a priestly caste. There are also sorcerers, and the key character combines prince and sunrunner and sorcerer. Rawn writes like an angel but there is nothing terribly new here except the pleasing use of sun, moon and starlight as the raw material of magic. One of the skeins of plot relies on a straightforward misunderstanding between Andry, the chief sunrunner, and Pol, the high princelet and magician, that makes you want to knock their stupid heads together. Made me want to read the others — but not that much.

Then there is the nearly-genre *Lion of Macedon* (Legend, £6.99) by

David Gemmell. Who was Philip of Macedon? And, if you have heard of Philip of Macedon, who was Parmenion? If you know then more likely than not it is because you have read Mary Renault, and if you have read Mary Renault you may well feel that Ancient Greece is so much her territory than anyone else ventures onto the same ground at his peril. Gemmell's book is about Parmenion and only a thin injection of magical intervention in his life pulls this book from the historical novel — where I suspect it would be considered honourable but fairly ordinary — into the fantasy territory — where I suggest it will not be terribly well received either. Neither fish nor flesh — but the ending brought a tear to my eye, which is something.

And finally an allegedly humorous novel by Craig Shaw Gardner, *The Other Sinbad* (Headline, £13.95), in which Sinbad the porter goes on a voyage with his more famous namesake. Humour is a very personal thing, so perhaps some of you will find the recycled Abbott and Costello "who's on first" routine hilarious, the valley of the talking figs hysterical, and the amorous orang utan who elects the hapless Sinbad as her banana man positively side-splitting. Sigh.

Small Press Round-Up Christopher I. Kenworthy

DREAM: A5, 70 pages. Bi-monthly, £1.75 (6 issue sub. £10).

Trevor Jones, publisher of *Dream* feels that the current sf establishment is holding back British sf. His solution to this problem, ironically, is to promote traditional "hard" sf, favouring a move away from radical/left fiction.

Dream's trad sf shows science solving problems, largely ignoring its negative effects. Although optimism may be too infrequent in sf, Jones' insistence on publishing "upbeat" stories can be regressive — looking at the world through rose-coloured mirrorshades.

In *Dream* No. 27 (January 1991), I was wary of the content because of

this glaring political overview. Fortunately, some of the stories rose above the editorial policy.

P.F. Hamilton's "Major's Children" is one of the most satisfying space shorts I have read. In many ways it's badly written; the Luke meets Han scene from *Star Wars* appears almost word for word, and Jannine is an infuriatingly wet character. Descriptions are powerful, if a little upbeat, and the pace is well controlled. Overall it's the idea of an alternative planetary evolution that make this worthwhile.

"Miss Blood" is Jack Wainer's adolescent horror offering. I hate to admit that the badly written doll-with-teeth cliché made me a wee bit scared. Throwback to a childhood experience.

"Goddess Without Love" by John Light is a direct exposition, where nothing happens or matters. The rambling descriptions of the colour blue are straight from Roget. Bad writing parading as experiment.

In 'An Honourable Estate' by Steven J. Wood, couples body-swap at arranged marriages. Human reactions to this social dilemma would have been interesting, but the plot is boring and ultimately ridiculous. Three seconds after Rhea's blissful entry into man flesh, an all-male war breaks out. Wood has a lot to learn.

Andy Smith and Rik Gammack also appear, but it's difficult to understand why. If the story is good enough, the political bias doesn't matter, but *Dream's* policy lets too much weak fiction through. If they keep modern movements in mind, things could improve.

THE GATE: A4, 42 pages. Quarterly, £1.50.

The Gate has been an irregular creation, and the 1989 A5 effort was appalling. There have been massive improvements with each subsequent issue, though its regularity remains highly questionable.

Readers of *The Gate* demand Good Clear Writing, according to the letters page. This backlash against experimental writing is unfortunate this early. What's the point of a magazine succeeding commercially without artistic achievement?

The Gate No 3. (December 1990, but mailed in February 1991) is a mixed bag of fiction. Storm Constantine has written a beautiful idea into a too-long story. In 'The Vitreous Suzerain' aliens bring out

human light. It could have been done better, but is memorably treated here.

"Honkey Tonk Man" by James A. Corrick is predictable; Sam lives in a society where he's one of the few real people, everybody else is a Sleepyhead. To every reader's utter amazement (honest!), Sam wakes up to find he's dreamed the whole thing. This pseudo-climax is reached half way through, and drags on.

"Les temps étrange sur l'île Fisseau" by David Barrett stands out because of its lyrical style. "Francoise, alone, is singing softly." Sense of wonder without mega tech images. Two lovers are parted in great pain, confused about their loss. We could forgive this sentimentality if the story didn't take such an obvious turn. Yes, that painting on the wall is a transdimensional gate. Ho-hum.

So far, *The Gate* is almost devoid of artwork, leaving more fiction space, but the stories rarely sparkle. I hope the editors try something more extreme, because the risk of failure (literary or otherwise), is no greater than with dull work. We should give *The Gate* a chance, because it could be developing into something special.

WORKS: A5, 50 pages. Quarterly, £1.60 (4-issue sub. £5.50)

Works has a print run of 400, and deserves better. It is well produced on glossy paper, but is too proud of its laser printed beauty. The letters column heartily debated Mood Fiction for some time, but now discusses various printing methods.

Don't think that "mood" is synonymous with "atmosphere"; in this context it means "bad mood." *Works* is less pretentious than most, being the infamous home of depressing British SF. The fiction smells bad, disturbing the senses and the intellect, giving *Works* a unique strength.

The stories in *Works* No. 7 (March 1991) are mostly short, some being barely longer than the poems (of which there are too many).

"Soap 7" by Craig Herbertson was a big disappointment. Lots of telecreens keep appearing, and we're meant to feel all isolated. It's in the Kim Newman "Gargantuabots vs the Nice Mice" mould — a pretty weak idea spread out in a self-righteous manner.

Stories by Sue Newman, Ian Watson and D.F. Lewis all contain the same angst-ridden humour.

Lewis's "Death Sweat" relates a Pot Noodle nightmare that terrifies.

"The Dose" by Steve Widdowson is a radiation story (in a forty year old tradition); he has managed to keep the sparkly wind interesting by introducing homeopathic science and a psycho-social reaction. People once danced in the fall out, but they are now decaying; that which seemed beautiful has brought corruption.

Mike O'Driscoll's "The Things We Do For Love" falls flat with a shock (that isn't a shock) ending, after an atmospheric build up in streets littered with frozen pigeons. His writing shows immense promise.

The best story in this issue is "Strange Attractor" by Mark Haw. Like much of *Works* writing, there's the feeling of 'They're out to get me, it's not my fault.' The chaos here is in the character's mind, and interest is created through a human reaction to confused sadness. The character moves between realities, but his awareness is centred on emotional desires. As the madness takes over, we are left with subdued sorrow rather than horror.

The shorts by Sean Friend, Andy Smith, D. Curl, Ian Watson, Paul Beardsley and Christopher Hart are, like most of *Works* poetry, unmemorable.

Although the ideas and mood are experimental, the writing itself in *Works* can be plain. He said, she said, and then... Words like "nameless pain" often drag a story back down to obvious-beginner level. Artwork, like the stories, is small and infrequent. One or two-full page drawings, correctly tied to a story, would be better. These are minor complaints, because *Works* is almost there, and is already a positive influence on modern sf.

R.E.M: A4, 48 pages. Quarterly, £1.95 (4-issue sub. £7.00).

R.E.M appeared ten months late, but it has already reached standards that others are working towards.

Issue No.1 (March 1991) opens with "Star Of Epsilon" by Eric Brown — hard brain-wires, mysterious science and some characterization. A dying fifteen year old girl performs her 'act' by letting punters jack-in to her emotion. The main character helps save her life by fluxing a quantum mind, with some impressive images. The conclusion is lacklustre, but satisfies.

Simon D. Ings provides a novella, "Hothead." (*R.E.M* promise more

lengthy works in future issues.) Ings has avoided the temptation of pun-rambling, and uses language effectively. An ex-Moon-Machine explorer, Inés, is robbed of her hardware senses when she returns to earth. To gain them back she agrees to star in porno-casts, which turn more sinister than was expected. The story develops over a background of a violent Moon (which blasts our cities), drone dogs, consciousness-shifting and a hinted alien mythology. A sense of the Clarke-Bear epic style, with more humanism.

The contributions from Keith Brooke, Mathew Dickens, Andrew Ferguson, Michael Cobley and William V. Nicholson are less embarrassing than they could be, but not worthy of inclusion alongside Brown and Ings.

With luck, *R.E.M.* will be more than just another outlet for *IZ* rejections, taking risks with a few unfamiliar names and styles.

BBR (Back Brain Recluse): A4, 54 pages. Quarterly £1.95 (4-issue sub. £6.30)

BBR has to be taken seriously. They know this and are quite smug about it. We don't care about how fully professional they claim to be, so long as the fiction continues to be of the same nature and standard.

BBR's "experimental" label frightens some potential readers. The Good Clear English mob are afraid of present-tense-free-writing mania; the experiment actually involves new ideas and styles being mixed to create original effects. When the experiments fail, we learn. When they succeed, the boundaries of modern fiction move on. Demanding works should live alongside reader-friendly stories.

In *BBR* No. 18 (March 1991), stories by Michael Moorcock and Todd Mecklam are disappointing. The rest are worth reading.

A story that almost makes it is "The Alien's Midwife" by David Hast. The first half is a good piece of reality inversion with some genuine atmosphere. Aliens (carried by lizard bodies) inhabit the characters' minds with narcotic effect. The development is too predictable, with a mass Earth invasion via our heroes. Some ridiculously over-the-top imagery just about makes this work, although the original tension and emotion is never satisfied.

"Notes For Luchenko's Third

Symphony" by Richard Kadrey is a brilliant example of experimental writing. The existence of extraterrestrials is cleverly assumed, and we are led through a cosmonaut's musical interpretation of his close encounter. The initial hints at chaos theory become complex statements as the music is described. Somehow, hints of the musical expression come through. The ending is a bit gimmicky, but barely detracts from an excellent work.

The best story to appear in the recent small press is "Theme From Shaft" by Mike O'Driscoll. The main character, Toole, dreams of being a white man — the highest aim for all blacks. This immediately makes the story controversial and interesting. The story centres around Toole's interaction with Lundy; a white man on the run, driven by fear into seeking surgical transformation to being black.

The story is violent and sad, but we can feel compassion for the violent characters because their society is so screwed up. The only morality appears to be a sexual one, driven by the fear of losing your card clearance through an UnSafe Fuck.

The idea is experimental rather than the telling, but "Theme From Shaft" is a definite landmark. It is longer than necessary and over-plotted at times, but it doesn't sell out — being white remains the black man's goal. Only in sf could this extremely sad effect be created, and that is why O'Driscoll has succeeded.

Unfortunately, there is a feeling that *BBR*, for all its reassurances, may suffer from commercial blanching. A reader's letter called for the editors to stop calling *IZ* conventional, and take a look at their own pages. This is probably too harsh, but serves a timely warning.

The standards of scientific awareness in the small press are disturbing. The most scientifically adventurous stories play with HIV, DNA, fractal chaos and a tiny bit of nano-tech, but these ideas are already common to sf book publishing. Small press writers should re-examine modern science and its relationship to sf for true progress to be made.

The British Small Press is essential to the literary future of all sf, and must remain aware of movements without succumbing to trends. Many 'fabulous first issues' will materialize in stapled photocopy, and most will disappear. Those with high

standards may survive, and occasionally they will push back the boundaries of modern writing.

(Christopher Kenworthy)

UK Books Received March 1991

The following is a list of all sf, fantasy and horror titles, and books of related interest, received by Interzone during the month specified above. Official publication dates, where known, are given in italics at the end of each entry. Descriptive phrases in quotes following titles are taken from book covers rather than title pages. A listing here does not preclude a separate review in this issue (or in a future issue) of the magazine.

Alcock, Vivian. *The Haunting of Cassie Palmer*. Mandarin/Methuen, ISBN 0-7497-0708-9, 155p, paperback, £2.99. (Juvenile fantasy novel, first published in 1980.) 7th March.

Alcock, Vivian. *The Stonewalkers*. Mandarin/Methuen, ISBN 0-7497-0707-0, 142p, paperback, £2.99. (Juvenile fantasy novel, first published in 1981.) 7th March.

Alexander, Marc. *Shadow Realm: Part the Third of The Wells of Ythan*. Headline, ISBN 0-7472-3027-7, 438pp, paperback, £4.99. (Fantasy novel, first edition.) 18th April.

Anthony, Piers. *Phaze Doubt*. New English Library, ISBN 0-450-54814-7, 303pp, hardcover, £14.99. (Sf/fantasy novel, first published in the USA, 1990; there is a simultaneous trade paperback edition [not seen]; the blurb states that it's the "seventh and last" book in the "Apprentice Adept" series; but we shouldn't celebrate too soon, as the author promises a new series "whose framework is such that the whole of the Proton/Phaze frames can be considered a subset of it.") 18th April.

Asimov, Isaac. *Frontiers: New Discoveries About Man and His Planet, Outer Space and the Universe*. Mandarin, ISBN 0-7493-0768-4, 390pp, paperback, £4.99. (Essay collection, first published in the USA, 1989.) 4th April.

Asimov, Isaac. *Puzzles of the Black Widowers*. Bantam, ISBN 0-553-40201-3, 254pp, paperback, £3.99. (Mystery-story collection by a leading sf writer; first published in the USA, 1990.) 25th April.

Asprin, Robert. *Myth-ing Persons*. Arrow/Legend, ISBN 0-09-974540-2,

172pp, paperback, £3.50. (Humorous fantasy novel, first published in the USA, 1984; fifth in the "Myth" series.) 4th April.

Baxter, Stephen. *Raft*. Grafton, ISBN 0-246-13706-1, 260pp, hardcover, £13.99. (Sf novel, first edition; proof copy received; expanded from a short story of the same title which first appeared in *Interzone* 31, this is Baxter's debut novel; recommended.) July.

Campbell, Ramsey. **Scared Stiff: Tales of Sex and Death.** Illustrated by J. K. Potter. Introduction by Clive Barker. Macdonald/Futura, ISBN 0-7088-4476-6, 177pp, paperback, £3.50. (Horror collection, first published in the USA, 1987.) 25th April.

Carroll, Jonathan. **Outside the Dog Museum.** Macdonald, ISBN 0-356-19589-9, 244pp, hardcover, £12.95. (Fantasy novel, first edition [?]; Carroll has now emerged as a major cross-genre talent, and the label "fantasy novel" scarcely seems to do his edgy work justice; as one reviewer quoted in the publicity matter says, "Carroll seems to have invented the tale that is convincingly supernatural in some episodes, psychological in others, and totally ambiguous in others"; see his short story "The Panic Hand" in *Interzone* 33 for a brief example of the style.) 11th April.

Carroll, Jonathan. **Voice of Our Shadow.** Macdonald/Futura, ISBN 0-7088-4898-2, 189pp, paperback, £3.50. (Fantasy novel, first published in the USA [?], 1983; this was Carroll's second novel, following *The Land of Laughs*, 1980.) 11th April.

Chalker, Jack L. **Charon: A Dragon at the Gate. Book Three of The Four Lords of the Diamond.** Penguin, ISBN 0-14-012321-0, 289pp, paperback, £3.99. (SF novel, first published in the USA, 1982.) 25th April.

Cherryh, C. J. **Chernevog.** Methuen, ISBN 0-413-65040-5, 329pp, hardcover, £14.99. (Fantasy novel, first published in the USA, 1990; sequel to *Rusalka*.) 18th April.

Cherryh, C. J. **Rimrunners.** Hodder/NEL, ISBN 0-450-54981-X, 288pp, paperback, £3.99. (SF novel, first published in the USA, 1989; reviewed by Paul McAuley in *Interzone* 34.) 4th April.

Dalton, Annie. **The Alpha Box.** Methuen, ISBN 0-416-15912-5, 192pp, hardcover, £8.95. (Juvenile sf novel, first edition.) 18th March.

Danvers, Dennis. **Wilderness.** Simon & Schuster, ISBN 0-671-71739-1, 256pp, paperback, £14.99. (Fantasy novel, first published in the USA [?], 1991; proof copy received; a first novel, about a woman who turns into a wolf, by a new American writer; the blurb describes it as "neither a horror novel nor a traditional werewolf tale, but rather a psychologically complex modern love story.") 15th July.

Dixon, Bernard, ed. **From Creation to Chaos: Classic Writings in Science.** Sphere/Cardinal, ISBN 0-7474-0803-3, 356pp, paperback, £5.99. (Anthology of science essays, first published in 1989; an interesting volume, in which many of the speculations verge on sf; the contributors include Francis Bacon, Winston Churchill, Charles Darwin, Freeman Dyson, J. B. S. Haldane, Fred Hoyle, W. H. Hudson, Julian Huxley, Arthur Koestler, Isaac Newton, Oliver Sacks, Marie Stopes and H. G. Wells.) 21st March.

Guest, Diane. **Lullaby.** Fontana, ISBN 0-00-617985-1, 299pp, paperback, £3.50. (Horror novel, first published in the USA, 1990; it says in small print on the back cover that it's a "Bernard Geis Associates Book," whatever that signifies; one thing which is pretty clear, though, is that this

is another attempt to cash in on the Virginia Andrews boom.) 28th March.

Hinz, Christopher. **The Paratwa: The Paratwa Saga—Book 3.** Mandarin, ISBN 0-7493-0559-2, 436pp, paperback, £4.99. (SF novel, first edition; this UK paperback precedes the US hardcover by about four weeks [see "Overseas Books Received," below].) 4th April.

Hodgson, William Hope. **Carnacki the Ghost-Finder.** Afterword by Iain Sinclair. Grafton, ISBN 0-586-21184-5, 270pp, paperback, £3.50. (Ghost-story collection, first published in 1910; about the adventures of a "psychic detective," these tales are classics of yesteryear's popular fiction; Sinclair's 14-page afterword is of considerable interest: he describes Hodgson's project as "to saturate the popularity of Sherlock Holmes in a speculative solution of Arthur Machen.") 28th March.

Holt, Robert L., and Frank R. Holt. **Peacemaker.** Headline, ISBN 0-7472-3559-7, 499pp, paperback, £4.99. (Near-future thriller, first published in the USA, 1990; those pesky Russkies are at it again, reviving the Cold War in the year 1998; some writers just long for the return of the good old days.) 18th April.

Jordan, Robert. **The Eye of the World.** "Book One of The Wheel of Time." Macdonald/Orbit, ISBN 0-7474-0817-3, 670pp, trade paperback, £7.99. (Fantasy novel, first published in the USA, 1990; reviewed by Wendy Bradley in *Interzone* 41.) 25th April.

Jordan, Robert. **The Great Hunt.** "Book Two of The Wheel of Time." Macdonald/Orbit, ISBN 0-356-19765-4, 598pp, hardcover, £13.95. (Fantasy novel, first published in the USA, 1990; reviewed by Wendy Bradley from the American edition in *Interzone* 44.) 11th April.

Koontz, Dean R. **Strangers.** Headline, ISBN 0-7472-0292-3, 537pp, hardcover, £14.95. (Horror novel, first published in the USA, 1986; a mass-market paperback edition appeared from Headline in 1990; as with some of Koontz's other books, they seem to have produced this hardcover for the library trade.) 11th April.

Leiber, Fritz. **The Knight and Knave of Swords: Book 7 in the Swords series.** Grafton, ISBN 0-586-20849-6, 361pp, paperback, £3.99. (Fantasy collection, first published in the USA, 1988.) 25th April.

Luard, Nicholas. **Kala.** Arrow, ISBN 0-09-968280-X, 589pp, paperback, £4.99. (Fantasy/adventure novel, first published in 1990; set in Africa in the 19th century, it's a well-prepared stew of ingredients from Rider Haggard and Edgar Rice Burroughs, featuring a beast-woman [who happens to have the same name as Tarzan's ape "mother"], a lost civilization, etc.) 18th April.

McKillop, Patricia A. **The Sorceress and the Cygnet.** Pan, ISBN 0-330-31748-1, 219pp, hardcover, £15.99. (Fantasy novel, first published in the USA, 1990; proof copy received; there is a simultaneous trade paperback edition [not seen].) 7th June.

McNally, Clare. **Hear the Children Calling.** Corgi, ISBN 0-552-13707-3, 319pp, paperback, £3.99. (Horror novel, first published in the USA, 1990; it appears to be one of that relatively new sub-genre of women's gothic horror tales which one may as well label "Virginia Andrews books.") 25th April.

Masterton, Graham, ed. **Scare Care.** Grafton, ISBN 0-586-21123-3, 496pp, paperback, £4.99. (Horror anthology, first published in the USA [?], 1989; this is a semi-original anthology in aid of children's charities, and the contributors have given their stories free; they include Harlan Ellison, Charles L. Grant, Marc Laidlaw, William F. Nolan, Kit Reed and J. N. Williamson [among the originals] and Ramsey Campbell, Roald Dahl, James Herbert, Brian Lumley and Ruth Rendell [among the reprints].) 11th April.

Moorcock, Michael. **The Revenge of the Rose: A Tale of the Albino Prince in the Years of His Wandering.** "An Elric Novel." Grafton, ISBN 0-246-13734-7, 233pp, hardcover, £13.99. (Fantasy novel, first edition; proof copy received; a pre-publication extract appeared in *Interzone* 46 as "Elric: A Dragon Wakes.") 9th May.

Naylor, Grant. **Better Than Life.** Penguin, ISBN 0-14-012438-1, 229pp, paperback, £3.99. (Humorous sf novel, first published in 1990; sequel to *Red Dwarf*; "Grant Naylor" is a pseudonym for Rob Grant and Doug Naylor.) 4th April.

Niles, Douglas. **Viperhand.** "Forgotten Realms. Book Two: The Maztica Trilogy." Penguin, ISBN 0-14-014373-4, 313pp, paperback, £4.50. (Fantasy novel, first published in the USA, 1990.) 28th March.

Pratchett, Terry. **Diggers.** "The Second Book of the Names." Corgi, ISBN 0-552-52586-3, 173pp, paperback, £2.95. (Juvenile fantasy novel, first published in 1990; reviewed by John Clute in *Interzone* 37.) 25th April.

Rankin, Robert. **They Came and Ate Us—Armageddon II: The B-Movie.** Bloomsbury, ISBN 0-7475-0818-6, 278pp, hardcover, £14.99. (Humorous sf novel, first edition; sequel to *Armageddon: The Musical*.) 25th April.

Rawn, Melanie. **Star Scroll: Dragon Prince, Book Two.** Pan, ISBN 0-330-31404-1, 589pp, paperback, £4.99. (Fantasy novel, first published in the USA, 1989.) 12th April.

Rice, Anne. **The Witching Hour.** Chatto & Windus, ISBN 0-7011-3583-2, 965pp, hardcover, £14.99. (Horror/fantasy "family saga," first published in the USA, 1990; one of the biggest novels we have seen in quite some time.) 11th April.

Salvatore, R. A. **Exile.** "Forgotten Realms. Book Two: The Dark Elf Trilogy." Penguin, ISBN 0-14-014376-9, 306pp, paperback, £4.50. (Fantasy novel, first published in the USA, 1990.) 28th March.

Shaw, Bob. **Dark Night in Toyland.** Macdonald/Orbit, ISBN 0-7088-8342-7, 190pp, paperback, £3.99. (SF collection, first published in 1989.) 25th April.

Shaw, Bob. **The Shadow of Heaven.** Collanace, ISBN 0-575-04916-2, 174pp, hardcover, £13.99. (SF novel, first

published in the USA, 1969; a different version was published by Corgi Books in UK paperback in 1978; this is the first world hardcover edition, and the text has been revised.) 11th April.

Siegel, Barbara, and Scott Siegel. **Tanis: The Shadow Years. Dragonance Preludes II, Volume Three.** Penguin, ISBN 0-14-014374-2, 320pp, paperback, £4.50. (Fantasy novel, first published in the USA, 1990.) 25th April.

Silke, James. **Tooth and Claw: Frank Frazetta's Death Dealer [Book 3].** Grafton, ISBN 0-586-07019-2, 316pp, paperback, £3.99. (Fantasy novel, first published in the USA, 1989; artist Frank Frazetta is named as the co-author on the spine, though not on the front cover or title page.) April.

Simmons, Dan. **Hyperion.** Headline, ISBN 0-7472-3482-5, 502pp, paperback, £4.99. (Sf novel, first published in the USA, 1989; the first UK mass-market edition of last year's Hugo Award winner; reviewed by John Clute in *IZ* 38.) 18th April.

Spencer, John. **The UFO Encyclopedia.** Headline, ISBN 0-7472-0273-7, 340pp, hardcover, £16.95. (Reference book, first edition; compiled on behalf of the British UFO Research Association.) 11th April.

Stableford, Brian, ed. **Tales of the Wandering Jew: A Collection of Contemporary and Classic Stories.** Dedalus, ISBN 0-946626-71-5, 368pp, paperback, £8.99. (Fantasy anthology, first edition; contains a 25-page introduction by the editor, followed by several poems and about 20 stories; about half the tales are "classic" reprints from such authors as Nathaniel Hawthorne, George MacDonald, Rudyard Kipling, O. Henry and John Galsworthy; the other half are new, previously unpublished works by Barrington Bayley, Robert Irwin, David Langford, Ian McDonald, Kim Newman & Eugene Byrne, Mike Resnick, Brian

Stableford and others; a most interesting volume.) 26th March.

Steed, Neville. **Hallowes' Hell.** Headline, ISBN 0-7472-3451-5, 310pp, paperback, £3.99. (Horror novel, first published in 1990.) 18th April.

Straczynski, J. Michael. **OtherSyde.** Headline, ISBN 0-7472-0375-X, 310pp, hardcover, £14.95. (Horror novel, first published in the USA, 1990.) 11th April.

Straub, Peter. **Mystery.** Grafton, ISBN 0-586-20958-1, 548pp, paperback, £4.99. (Horror novel, first published in the USA, 1990; reviewed by Paul McAuley in *Interzone* 37.) 25th April.

Swycaffer, Jefferson P. **Web of Futures.** "A Fantasy Palindrome." TSR, ISBN 1-560-76059-1, 312pp, paperback, £2.99. (Fantasy novel, first published in the USA, 1991; this is the US printing of February 1991 with a UK price sticker; one of the first TSR titles to be distributed in Britain by Arrow Books [see note below, under Paul B. Thompson].) 21st March.

Taylor, Derek. **The Mirrorwell Express.** Droylata Books [7-11 King St., Ipswich, Suffolk IP1 1EG], ISBN 0-9517314-0-8, 63pp, paperback, £3.99. (Sf novella, first edition; "tells the story of a battle in space between the proprietors of the tabloid press"; it appears to be self-published.) 9th May.

Tepper, Sheri S. **Raising the Stones.** Grafton, ISBN 0-246-13790-8, 465pp, hardcover, £13.99. (Sf novel, first published in the USA, 1990; proof copy received; there is a simultaneous trade paperback edition [not seen].) 11th July.

Thompson, Paul B., and Tonya R. Carter. **Firstborn: Elven Nations Trilogy, Volume One.** "Dragonlance." TSR, ISBN 1-560-76051-8, 305pp, paperback, £3.99. (Fantasy novel, first published in the USA, 1991; this is the US first printing of

February 1991 with a UK price sticker; TSR books are now being distributed in Britain by Random Century/Arrow Books; presumably no more will be appearing from Penguin.) 21st March.

Waldrop, Howard. **Them Bones.** Arrow/Legend, ISBN 0-09-966210-8, 218pp, paperback, £3.99. (Sf novel, first published in the USA, 1984; reviewed by Kim Newman in *Interzone* 33.) 4th April.

Wilson, Robert Charles. **Gypsies.** Macdonald/Orbit, ISBN 0-7088-8353-2, 311pp, paperback, £3.99. (Sf novel, first published in the USA, 1989; reviewed by John Clute in *Interzone* 40.) 25th April.

Overseas Books Received

Greeley, Andrew M., and Michael Cassutt, eds. **Sacred Visions.** Tor, ISBN 0-312-85025-5, 363pp, hardcover, £22.95. (Sf anthology, first edition; there is a simultaneous trade paperback edition [not seen]; a selection of stories on Roman Catholic themes, including well-known work by James Blish, Anthony Boucher, Walter M. Miller and Robert Silverberg; there are also newly-commissioned stories by Jack McDevitt, Gene Wolfe and both the editors.) July.

Hinz, Christopher. **The Paratwa: The Paratwa Saga—Book 3.** St Martin's Press, ISBN 0-312-05489-0, 404pp, hardcover, \$19.95. (Sf novel, first published in the UK, 1991 [see entry above].) 28th April.

Modesitt, L. E., Jr. **The Magic of Recluse.** Tor, ISBN 0-312-85116-2, 442pp, hardcover, \$19.95. (Fantasy novel, first edition; proof copy received.) May.

Wrede, Patricia C. **Mairelon the Magician.** Tor, ISBN 0-312-85041-7, 280pp, hardcover, \$17.95. (Fantasy novel, first edition; proof copy received; it appears to be a cross between fantasy and Regency Romance, set in "an England That Never Was.") June.

COMING NEXT MONTH IN INTERZONE

In our 50th number, as well as the mind-bending conclusion of Stephen Baxter's "The Baryonic Lords" we bring you new delights by Greg Egan ("Appropriate Love"), Diane Mapes ("Remnants"), Nicola Griffith ("Wearing My Skin") and Ian Lee ("Pigs, Mostly"). Plus interviews, reviews and all the usual.

So be sure to look out for the issue of *Interzone* which is dated August 1991 and on sale in July.

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